

The UK Manufacturing & Engineering sector is one of the most important sectors in the UK, contributing 11% of the country's GDP and employing more than 2.5 million people. The sector is also responsible for 70% of R&D spending in the UK, benefiting from the highest average R&D claim value (£50,000), as companies constantly strive for the appreciable improvement of an established product or process, or the realisation of a ground-breaking technological improvement, and everything in between.









Paper, Printing & **Packaging**



Chemical & **Pharmaceuticals**



Rubber & Plastics



Electrical



Apparel & Textiles



Food, Beverage & Tobacco



Tools & Die



Metals



Energy & Fuel



EXAMPLES OF QUALIFYING R&D ACTIVITIES – MANUFACTURING & ENGINEERING SECTOR

- (v) Development of next generation products with improved qualities, performance and efficiencies, such as strength, durability, wastage
- (v) Integration of new or alternative materials or techniques to improve product performance or manufacturing processes
- Adaptations driven by legislation changes, environmental aims, or operational efficiency
- The design, development, and testing of protypes.

- (1) Streamlining, scaling up or increasing the precision of manufacturing processes
- O Development of tooling and equipment such as jigs, moulds, dies and machinery
- (1) Integrating technically complex manufacturing processes
- O Development of software, computer models or use of computer aided tools
- Automating operations and developing robotics

CASE STUDY 1

- Nature of R&D: Air conditioning tanks for London underground
- Overview: : Development of air conditioning tanks that were less prone to sustaining damage due to temperature related expansion and contraction, by improving on the materials and constructions methods used to put the tanks together in order to achieve best temperature resistance and improve durability.
- (v) Tax relief generated: £59,000

CASE STUDY 2

- Nature of R&D: Technical clothing to shield against the spread of infectious diseases
- Overview: Development of a hooded garment composed of enhanced fabric and design that demonstrated significant resistance to liquid exposure, negated the potential of penetration and offered advanced protective qualities.
- Tax relief generated: £38,000

CASE STUDY 3

- Nature of R&D: Precision Engineering: Coils & Springs
- Overview: Our client is a specialist component manufacturer, producing complex coils and springs. These bespoke parts must be fit for purpose, including tensile strength, torque and material type.
- Tax relief generated: £38,000

OK, SO WHAT CAN MANUFACTURING COMPANIES CLAIM FOR?

New product development: It's worth nothing that if the new product requires the company to make an advice in science or technology, and resolve technical uncertainties, then the company will be able to claim for these costs.

Scaling up: Even when a new product has been straightforward to develop and produce at small scale, companies often come up against challenges when scaling up manufacture. Again, if overcoming these challenges requires advances to be made in science or technology the company may be able to make a claim.

New legislation: Manufacturing companies are often restricted by government legislation as to how and with what components they can produce their products. Therfore, when legislative changes are brought in, they may be required to carry out qualifying R&D to make their products compliant.

Integration: Across all types of manufacturing new raw materials regularly become available, some of which will improve performance of established products or enable new functionality to be added. Where integrating or incorporating these new meterials requires advances to be made, the costs may qualify for relief.

