

From sustainable packaging through to three-dimensional printing, R&D in the printing & packaging sector is perhaps seeing the biggest development in innovation since the industrial revolution. These projects are not just everyday activities, they are activities which probably qualify for significant R&D tax relief.



EXAMPLES OF QUALIFYING R&D IN PRINTING & PACKAGING:

- (f) Developing new materials to meet environmental requirements
- O Developing ways of using natural plant life as a source of packaging
- Minimum Improving the efficiency of product packaging
- Reducing the amount of waste for raw materials during production
- (v) Enhancing the speed of packaging operations
- Minimum Improving existing packaging processes to increase automation and streamline operations
- (v) Improving processes to reduce pollution and greenhouse gas emissions
- O Developing new package designs that extend the shelf life of a product
- O Developing new package designs that incorporate greater recycled and recyclable materials
- **(V)** Refining quality assurance procedures
- Minorove design, prototype, test new packaging using 3D CAD modelling, 3D printing, and prototyping
- (v) Development of innovative closure mechanisms such as re-sealable or magnetic; Sterile & Tamper Proof Packaging
- Research into heat and cold tolerances of materials and how they perform when frozen or heated
- Trialling and testing new printing methods and techniques
- Trialling the reaction and performance of various inks and their chemical reaction when used on difference materials
- O Development of inks that are cheaper / environmentally friendlier / more efficient
- **Solution** Experimenting with different substrates, inks and primers
- Attempting to improve the detail of print, quality of finish or speed of printing through trial-and-error modifications



CASE STUDY 1

- ✓ Nature of R&D: Manufacturing strip and seal packaging that was environmentally friendly for the mass ecommerce market.
- Overview: To meet the demand for packaging in various sizes from the growing ecommerce sector, this specialist packaging company developed a complete range of "peel and seal" packaging that consistently met and exceeded the durability and reliability of conventional packaging as well as being highly environmentally friendly.

CASE STUDY 2

- Nature of R&D: Commercial Printing Company
- Overview: A commercial printing company that developed new printing methods to become GREENGUARD compliant for public environmental projects & displays, and ISO 9001 compliant for recycling.
- ✓ Tax relief generated: £58,273

CASE STUDY 3

- Nature of R&D: Greeting card manufacturer developed biodegradable glitter that replaced traditional used glitter products that was proving to be environmentally harmful.
- Overview:: The manufacture was conscious that glitter particles were finding their way into the waterways of the UK, it decided to develop a new range of greeting cards that were both recyclable and biodegradable. This challenge lead to intensive trials of biodegradable materials that could be printed on to emulate the glitter features.
- **♂ Tax relief generated: £38,000**





