

Mobile        07534 209110  
Email         [richard@convergenteng.co.uk](mailto:richard@convergenteng.co.uk)

## Personal Profile

I am an experienced, qualified and practical mechanical design engineer with a track record of taking projects from a clean sheet to production ready machine.

## Career History

August 2011 – present

### **Convergent Engineering Design Ltd. (CED), Crewe**

CED is my own company and is a provider of mechanical design and development services either on a project or contract basis. I have a fully maintained seat of SolidWorks 3D CAD.

In addition to mechanical design for others, I also develop my own products, primarily for use in the printing and packaging industries. Usually, these products are licenced to others for on-going manufacture and sale.

January 1991 – July 2011

### **Director**

### **Macon Management and Design Ltd. (MMD), Crewe**

MMD is a small engineering design company. I had total responsibility for all mechanical design and development aspects for all projects.

Specific duties included:

- Mechanical design – using Solidworks 3D CAD
- Documentation – drawings and technical manuals
- Organisation of manufacture using subcontractors
- Assembly, test and development
- World-wide technical support involving overseas travel and customer training
- Sales presentations and proposals

1987 – December 1990

### **Principal Mechanical Design Engineer**

### **Lundy Product Development Centre, Crewe**

The lead designer of a small team set up specifically to take some McCorquodale printing technology and develop it into a product for Lundy. This product was a high speed impact printer. At the time, it was the fastest impact printer in the world and had novel methods for measuring paper thickness and adjusting the printer to suit.

1985 – 1987

### **Senior Design Engineer**

#### **Concetta Ltd (formerly McCorquodale Machine Systems), Crewe**

Responsible for design and development of the finishing sections of an integrated cheque book production machine. Elements designed included a document collator and a power guillotine. The power guillotine technology was subsequently sold to another machinery supplier who still manufactures systems based on my design.

1977 – 1985

### **Product Engineer rising to Chief Design Engineer**

#### **Express Lift Co. Ltd., Northampton**

Designed and developed various parts of lift systems together with on-site troubleshooting as required. Projects included stress analysis of lift frames, design of new door operating mechanisms, soundproofing investigations and the design of a new hydraulic control valve.

### **Patents**

I am the register inventor, either alone or with others, of the following Patents:

GB2363602 Feed Singulation Device

GB2263820 A Printing Apparatus having one or more stepping motors

US5381064 Print Wheel Motor for Encoder

US5204537 Thickness Sensor comprising a Leaf Spring Means and a light sensor

US5118209 Print Gap Optimizer

GB2175070 Lift System

### **Qualifications and Training**

2016 CE Marking Essentials Workshop

2007 Introductory welding course at Reaseheath College, Nantwich

2001 Solidworks 3D CAD Training

1990 Chartered Mechanical Engineer

Member of the Institution of Mechanical Engineers

1987 Masters Degree; Loughborough University

1977 Bachelors Degree; University College London

### **Relevant Interests**

I have a two Triumph cars; a Spitfire that I have owned from 1982 and a Herald Estate. I maintain and restore these cars myself.