

# **Adam Oakley BEng (Hons), PGCert, PGDIP, MSc, AMIMechE**

Consulting Forensic engineer

## **Qualifications and Awards**

- 2023 Associate Member of Institution of Mechanical Engineering**  
(Working towards Chartered Status)
- 2012 Design for Six Sigma Green Belt**
- 2008 MSc in Mechanical Engineering**  
Birmingham City University
- 2007 Postgraduate Certificate and Postgraduate Diploma in Mechanical Engineering**  
Birmingham City University
- 2006 BEng (Hons) in Mechanical Engineering**  
University of Central England

## **Current Employment**

**2023 – Date**

**Strange Strange and Gardner, Birmingham**

**Consultant Forensic Engineer**

I joined Strange, Strange & Gardner as a Consulting Engineer in August 2023, having worked for over 14 years within the engineering industry. I work closely with Mr Steven Tudor, Partner of Strange, Strange and Gardner. Investigation into the root cause of mechanical failures in a variety of applications, including vehicles, fixtures and fittings, automatic doors, slips trips and falls including Pendulum testing in accordance with the slip resistance guidelines.

Strange Strange and Gardner are principally involved in safety matters where litigation is or may be involved, providing professional expert opinion by way of comprehensive reports and evidence in Court. The firm is consulted mainly by Insurance Companies, Solicitors and Loss Adjusters, mostly where an incident has caused death, personal injury, or disease.

Each investigation normally involves an inspection of the equipment and/or site concerned, followed by preparation of a comprehensive report to CPR part 35 guidelines, supported by photographs, drawings, and calculations. However, desktop reports (where a site inspection is either not possible or considered unwarranted) are common. Any report considers the implications of relevant legislation and published authoritative literature, such as information from the Health & Safety Executive and applicable British and international standards.

**May 2016 – August 2023**

**Honeywell Hymatic, Redditch**

**Advanced Test Engineer**

An engineering company that operates in the aerospace, defence and Space sector specialises in High pressure gas supply systems and cryogenic technology. Key duties in this position involved the running of numerous projects for large international defence customers using high pressure (9000psi) electron beam welded gas bottle assemblies with low leakage rates and associated precision pipework

assemblies. Development of Pyrotechnic firing systems. Defining of qualification test schedules and implementation of acceptance test programs required for new products to ensure they meet customer requirements. Weekly update calls (remotely and face to face) to provide technical assistance on future and existing projects.

**January 2011 – May 2016**

**Honeywell Hymatic, Redditch**

**Project Engineer**

An engineering company that operates in the aerospace, defence and Space sector specialises in High pressure gas supply systems and cryogenic technology. Key duties in this position include writing and maintaining test procedures. Validation and writing of build specification relevant to the existing product and future products. Experience in design, development, and manufacture of bespoke Joule Thomson Coolers for use in ballistic applications to customer specifications and requirements for bespoke customer interfaces. The envelope of these complex high pressure precision assemblies is the approximate size of an AA battery and comprised of miniature heat exchanger, pressurised bellows valve actuation arrangement and numerous resistance welding operations. Development and build of test rigs suitable for the testing product to meet customer performance requirements. Analysis and improvement of existing bespoke miniature manufacturing processes.

**April 2008 – January 2011**

**HydraPower Dynamics Ltd, Birmingham**

**Project Engineer**

An engineering company which specialises in tube manipulation, hose assemblies and automotive hydraulics. Key duties in this position include the extraction of XYZ data from customer drawings to ensure that components can be manufactured using CNC bending machines. The collation of engineering data from drawings processed on self-created systems for analysis and quotation of pipe assemblies. Participate in and lead projects on new product introduction, process changes and continuous improvement activities. Responsibility for delivering a product into production whilst ensuring information is clear and concise to meet customer satisfaction. Involved in introducing new part drawings to the shop floor and ability to demonstrate and train on the processes involved as well as discussing options with customers using a methodical approach. Able to interpret, assess and comprehend aerospace standard drawings of components. Worked with diverse customers and clients in transport, industrial and aerospace.

**July 2003 – September 2006**

**Meteor Garage, West Bromwich**

**Mechanic**

Working in the family run car repair garage during university holidays, experience in general vehicle servicing and maintenance including and not limited to timing belt replacement; cylinder head gasket replacement; suspension changes and modification; vehicle body restoration (MIG and ERW welding, panel beating, paintwork preparation); radiator replacement; engine rebuilds (standard and modified air-cooled VW); carburettor refurbishment; multiple machining operations (milling and turning). This work is still ongoing though my own vehicle restoration projects in my spare time.