

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

Consulting Forensic engineer

Qualifications and Awards

2026	UCPD in Forensic Collision Investigation	De Montfort University
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

August 2023 – Present

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 and reporting 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. Reporting on the applicability of PPE used in a variety of industrial applications. All manner of road traffic accidents, trained under Michael Corrigan who has 30 years' experience in RTA and has completed the UCPD in Forensic Collision Investigation with De Montfort University.

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. Machining and turning of high precision one-off components as required for testing using manually operated machinery. 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. Machining and turning of high precision one-off components as required for testing using manually operated machinery.

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. Development and manufacture of one-off assemblies and components to customer requirements requiring milling and turning operations using manually operated machinery. 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 through my own vehicle restoration projects in my spare time.