



SUMMARY

15 Years doing high-profile racing. 6 Years as a development driver within McLaren Automotive. Operating within the top 10 manufacturers globally and across the top 10% of teams, ranging from front, rear wheel drive, prototypes cars.

EXPERTISE

- Start to finish project management on automotive/race development programs.
- Communication and driver feedback with engineers and high-level executives.
- Dynamic testing and development driving.
- Objective analysis & subjective feedback.
- Showcasing vehicles at high profile events and races.
- Nurburgring license and over 6 years experience of driving and testing on most well know circuits worldwide.

CAREER EXPERIENCE

McLaren Automotive

2011 – Current

Test & Development Driver

Projects including:

- MP4-12C - Recruited as second test and development driver at the company to work alongside Chris Goodwin (chief test and development driver at McLaren Automotive.)
- McLaren P1 – Gained more responsibility on this project as member of the development team.
- McLaren 650S – Worked on this project through every stage alongside the engineers and management. Carried out testing and development work with sole responsibility and feedback.
- McLaren 675LT – Lead Test and Development Driver. Over the course of one and a half years I was dedicated to this project and responsible for the development of the car and set-up in order to reach all of our targets by a set launch date. All of which were met and the car sold out within weeks.

The project targets included lap time, driver engagement, road feedback, NVH, Steering weight & feedback, suspension, brakes and gearshift strategy to name a few key points.

- 570S - 570GT – Contributing to tests and development loops.
- Current – Working on the current models, which are due to be launched in the future.



- McLaren GT3 - During my time at McLaren I was also involved in the development of the 12C GT3 car and continue to work with MGT to shakedown and prepare their race cars.
- P1 GTR – Driving, development and durability testing. Preparing cars for high profile events.

**During my time at McLaren working on various projects my role included:
Test & Development Role Responsibilities:**

Dynamic Testing, including:

- Suspension collaboration, tyre testing, steering weight & feedback, active aero collaboration, brake systems (Feedback & Performance).

Specialised in Driver Engagement and in car experience.

Test Procedures, including:

- Powertrain – Engine & Gearbox development & calibration.
- Tyre development.
- Brake & Steering feel.

Extreme Environment Testing, including:

- Hot Environment Testing (HET) - High speed track laps, brake durability and powertrain cooling. HVAC Performance.
- Cold Environment Testing – Track laps, ESP calibration and performance.
- Maximum Velocity Testing at Nardo Technical Proving Ground.

HMI Displays & Ergonomics, including:

- Driver interaction, comfort, accessibility.

Electronic Stability Programs, including:

- Anti Brake System (ABS), Traction Control System (TCS) Vehicle Dynamic Control (VDC) collaborating all these areas in all different environments. i.e Wet, Dry, Ice handling tracks as well as going to the Nurburgring.

Aerodynamics – High speed manoeuvres and track driving to understand aero balance.

Road Damper Tuning - Calibrating suspension software to hit road comfort targets. Impacts & general ride and engagement.



Noise vibration and harshness (NVH) – Experience and volume from the engine/exhaust.

High Speed lap time development –

- Model differentiate, load on individual suspension components.
- Driftability collaboration.
- ESP Performance.

Press Work:

- Driver for press days, including photoshoots, filming, working with press crews and offering high speed driving, drifting and precision driving.
- Preparing the cars for press events, including live shows, filming and magazine work. Working with press teams and journalists.
- Driving & Showcasing the latest range of cars at high profile events including Goodwood Festival of Speed, Car Shows, Goodwood Members Meeting etc.
- Driving at F1 Sponsor events – liaising and driving with F1 drivers and high profile celebrities.
- Interviewing with journalists – sharing information about the car, driving them in the car around tracks, showcasing the car and demonstrating the cars abilities.
- Shaking down cars for events – finalising tyre pressures and set up to maximize lap times and car performance.

Other responsibilities include:

- Lead lap time Driver.
- McLaren Simulator – testing components pre manufacture for all automotive projects.
- Liaising with project teams, engineers and mechanics to reach individual testing targets and overall project targets.
- Sharing ideas, knowledge and experience with colleagues from over 15 years in motorsport industry and 6 years in automotive.
- Evaluating contractual drivers for durability test work & development. (Responsible for approving them for this).
- Liaising directly with high-level company executives and directors.
- Presenting car development progress to high level company individuals. Demonstrating what the car can do and showing them around the vehicle explaining new features that have been developed. Driving them on track to demonstrate the development progress.



QK Performance Ltd February 2010 - 2012

A friend and I formed our own company QK Performance Ltd, which offered a number of performance enhancing products for both race and road cars. We also offered driver coaching both on and off track. Driver mentoring and data analysis over race weekends and press work for magazines.

2005 – 2010

On completion of my course at college and alongside my racing I worked freelance and list below some of the companies and positions that I worked in.

Silverstone Race School – Fully qualified ARDS instructor and worked for the school on a number of corporate and experience days.

Motorbase Performance – No. 2 Mechanic on Porsche GT3 Cup Car including preparation of my own race car in 2006 which I ending up winning the championship. I was a no. 1 mechanic in the workshop and at selected test days however due to my race commitments I couldn't accept the responsibility of this position at race meetings.

2003 - 2004

- RPM Motorsport – No. 2 Mechanic on a Porsche GT3 Cup Car.
- Trackspeed – No. 2 Mechanic on a Porsche GT3 Cup Car

Education:

St. Bedes, Hailsham, Sussex 1999 – 2002

GCSE's obtained in the following subjects: Maths, English, Science, CDT, Art.

Rycotewood College, Thame, Oxford. 2002 - 2005

3 year course in Advanced Motorsport Engineering as an apprenticeship.

Qualified with a National Diploma.

- Worked at Quaife Engineering as part of my apprenticeship for the first two years. Gained experience on how to draw on both paper and using CAD software. I covered CNC machining as well as a period in the fitting bay building various Quaife products such as differentials, gearboxes, steering racks, transfer units etc.

Trained in all departments within the company learning skills and gaining experience in:

- Assembling Quaife products, Working CNC & Milling machines, Engineering drawing (CAD), Car maintenance.