

CATAGEN

green emissions testing

PARTNER CASE STUDY

Motorcycle Catalyst Ageing for Homologation



CUSTOMER PROFILE: MV AGUSTA

MV Agusta is a premium Italian motorcycle manufacturer renowned for high-performance engineering, distinctive design, and racing heritage. Operating in a tightly regulated global market, MV Agusta must ensure its powertrain and exhaust emissions systems meet stringent homologation requirements across multiple regions, without compromising performance or development timelines.

PROJECT OVERVIEW

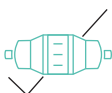
MV Agusta engaged CATAGEN Green Emissions Testing to support the homologation of an 800 cc motorcycle, requiring accurate, regulator-aligned catalyst ageing data delivered within a planned homologation timeframe.



The programme was defined in collaboration with IDIADA, after which CATAGEN Green Emissions Testing immediately commenced a controlled accelerated ageing programme consisting of 54 hours at 775°C, operating at a flow rate of 20.24 g/s.



All ageing was carried out using CATAGEN's patented, electrically driven OMEGA synthetic gas reactor.



Catalyst parts were received, aged, and returned to MV Agusta's facility in Italy within one week, thereby respecting the very stringent plan.



The full ageing report and complete raw data pack were delivered within days of test completion, providing full traceability and reproducibility permitting MV Agusta to complete their final exhaust emissions tests as planned.

TECHNOLOGY AND DELIVERY

The OMEGA reactor enables engine-free catalyst ageing under precisely controlled temperature, flow, and gas conditions, eliminating engine variability while delivering highly repeatable data. This approach allows OEMs and motorcycle manufacturers to accelerate validation timelines, reduce cost, and significantly cut CO₂ emissions associated with conventional engine-based ageing.

MV Agusta highlighted the responsiveness of the CATAGEN Green Emissions Testing team, the speed of turnaround, and the quality and clarity of the data delivered, all of which supported a smooth and confident homologation process.



to clean and decarbonise the air



CATAGEN proved to be a very reliable partner for our motorcycle catalyst ageing activities. From the early technical alignment through to project completion, the team demonstrated strong regulatory understanding, excellent planning discipline, and a clear focus on our homologation deadlines.

The ageing programme was executed precisely as agreed, with fast turnaround and comprehensive documentation that allowed us to proceed confidently with our emissions validation.

Their structured, engine-free approach and the consistency of the results made the overall process efficient and predictable. A further plus point is the friendly and kind nature of all the people I've worked with. We look forward to working with CATAGEN again.

FRANCESCO VALENTINI

Head of Homologation and Regulatory Affairs
MV Agusta Motor S.p.A.