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Catalyst Ageing Checklist

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1. **Develop a Catalyst Ageing strategy to meet emissions legislation by 2024.**
Euro 5 motorcycle emissions legalisation requires OEMs to test their OBD systems to show they will effectively work when emissions levels of CO, THC and NOx pass a threshold limit. This legislation will come into effect for new vehicles in 2024 and existing vehicles in 2025. **This is the perfect time for OEMs to understand their vehicle emissions to guarantee success for passing legislation requirements.**

2. **Compare latest technology in ageing with your current process to determine** cost and time savings.

3. **Is your current method reproducible?** Does it provide consistent accurate data for development or deliver accurately aged parts that can be repeated for different legislative areas/needs as required.

4. **The CATAGEN Toolset can track the ageing experience in real time using the proprietary CATAGEN Ageing Metric.** This metric can be used to quantify the total ageing experience for comparisions, test design and degradation history for physical and virtual development of aged parts.

5. **Characterisation requirements -** engine and catalyst development cycles can be enhanced through industry leading reproducible performance measurements such as emissions conversion efficiences and oxygen storage capacity.

6. **PGM Optimisation considerations:**
   - Material substitutions
   - PGM quantity reduction
   - Meeting legislation
   - Future proof designs

7. **Packaging** – use aftertreatment simulation techniques to overcome design challenges and optimise for cost, size and design aesthetics.

8. **Forecast your ageing requirements at least 3 to 6 months in advance.** Consider the most challenging obstacles such as full useful life emissions, OBD limit emissions and calibration.

9. **Find an ageing partner with industry leading reproducibility** that can match your desired catalyst bed temperature, emissions and mass flows exactly. Where possible eliminate fuel expenditure and CO^2 emissions whilst being recognized by bodies such as VCA or IDIADA.

Interested? –
Contact one of our Motorcycle Technical Experts

Clean air partnership