AUTOCATALYST COATING QUALITY

RELIABLE DATA SAVE MONEY AND REDUCE RISK
Small, uncontrolled variations in the application of reagents during the manufacture of automotive catalysts can have a large impact on financial contracts and in some cases negatively affect catalytic performance. SGS Minerals Services provides reliable, high quality analytical and specialized materials characterization services to the manufacturers, buyers and sellers of autocatalysts.

AUTOMOTIVE COMPANIES
SGS helps automotive companies manage their transactional and final product recall risks by providing an independent assessment of substrate, formulation and coating quality.

AUTOCATALYST MANUFACTURING COMPANIES
Catalyst manufacturing plant laboratories receive direct support from SGS to ensure data quality and to handle sample surges. This includes the manufacture and certification of analytical standards, method development, quality audits and check-analysis services. Plants also use SGS laboratories to confirm reagent quality prior to formulation and to confirm new converter quality prior to full-scale production.

AUTOCATALYST RESEARCH AND DEVELOPMENT GROUPS
For groups involved in the development of new autocatalyst formulas and technology, SGS provides confidential and reliable analytical and specialized materials characterization support.

RELIABLE ANALYTICAL DATA
ISO-accredited laboratory procedures objectively monitor precision, accuracy and relative standard deviation using reference materials and duplicate samples. SGS routinely analyzes catalyst materials and provides high-precision analytical data with RSDs of 0.7-1.5% (1 sigma). Accuracies better than 1% are typical for formula reagents, including rhodium.

SPECIALIZED MATERIALS CHARACTERIZATION
The application of the metal-laden slurry is as important to catalytic function as reagent formula and metal loading. Metal analysis alone will not always confirm that a catalyst will perform to specification on an automobile. SGS has developed a range of optical and electronic imaging tools that, when coupled with metal-loading analysis, allow greater insight into the performance of the final part on an automobile. These tools measure key coating quality indicators like cell wall thickness, coating number and coating thickness. Special attention is paid to coating defects such as variation in coating thickness, voids/vugs, cracks and delamination.

Delamination
WHY SGS?

SGS’s laboratory in Lakefield, Canada, has been providing high quality analytical and specialized materials characterization services to the automotive catalyst industry since 1995. The Lakefield laboratory is recognized by buyers and sellers alike. It successfully conforms to ISO requirements for specific registered tests and currently has an extensive suite of specific registered tests. Independence, integrity and technical expertise are the core values that define our business.

CONTACT INFORMATION

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