

The role of the European Engine Lubricant Quality Management System (EELQMS) and the ATIEL Code of Practice.



19th ICIS World Base Oils & Lubricants Conference 19-20 February 2015 - London, UK



Speaker introduction



Peter Tjan

- President of ATIEL since 2011
- 25-year career in the oil industry
- Experience in refining, lubricants marketing and sales



What we will cover

- ATIEL's role in the lubricants industry.
- The European Engine Lubricant Quality Management System (EELQMS)
 - How it helps marketers of engine lubricants claiming to meet European OEM quality requirements support their performance claims.
- The ATIEL Code of Practice
 - How it supports a cost-effective approach to lubricant development while giving reassurance to OEMs and end-users of the quality and consistency of lubricants.
- ATIEL Quality Surveys
 - Work ATIEL undertakes to assess compliance with quality requirements among products in the marketplace.

About ATIEL

"ATIEL is a representative body for manufacturers and marketers in the European lubricants industry. ATIEL, in cooperation with other industry stakeholders*, seeks to enhance the reputation of the lubricants industry by providing expert advice to regulators, industry partners and end-consumers, and by promoting superior standards of technology and lubricants performance."







ATIEL members









































20 member companies - European and global representation

otiel

ATIEL: key activities (1)

For its members -

- Provides a forum for debate on topical non-competitive industry issues and a platform for sharing resources and expertise.
- Through the work of technical committees and working groups:
 - Monitors technical trends and regulatory programmes.
 - Facilitates the development of scientifically sound responses to changes in market needs.
 - Promotes European quality standards and best practices globally.
 - Delivers training to members.
 - Carries out quality surveys to assess levels of compliance.

otiel

ATIEL: key activities (2)

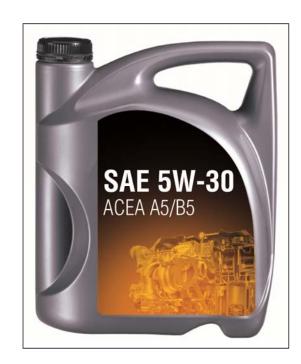
For regulators, industry partners and end-consumers

- ATIEL contributes to the development of best practices and standards that promote superior quality products in the marketplace.
- Through the collective expertise of its members ATIEL:
 - Sets clear and consistent guidelines and best practices that address the needs of vehicle manufacturers and consumers.
 - Acts as a focal point for technical issues relating to the performance and environmental demands of engine oils.
 - Delivers training to industry partners and national associations.
 - Acts as a respected partner and advisor on lubricants matters to all external stakeholders.



Role of quality standards

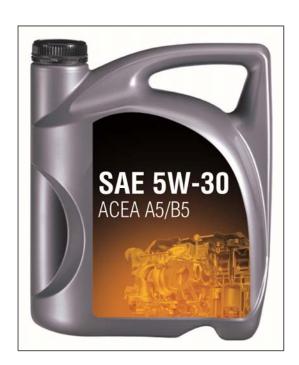
- Example of an engine lubricant with an ACEA (European Automobile Manufacturers Association) performance claim (ACEA A5/B5).
- The ACEA European Oil Sequences are quality standards for engine lubricants used in light duty passenger cars & heavy duty trucks.
- The ACEA Oil Sequences are updated regularly to address:
 - Changes in legislation
 - Changes in engine technology
 - Changes in fuel composition





ACEA performance claims

- Lubricant marketers are responsible for all aspects of product liability!
- Lubricant marketers claiming ACEA performance can include claims for specific engine categories on their product labelling.
- For these claims to be valid ACEA <u>requires</u>
 these engine lubricants to be developed
 in accordance with the European Engine
 Lubricant Quality Management System
 (EELQMS).



About the EELQMS

- The European Engine Lubricant Quality Management System (EELQMS) is a voluntary quality management system for automotive engine lubricants.
- Developed out of a shared interest amongst industry stakeholders for a quality management system to assist in the development of improved, fit-for-purpose engine lubricants that meet the increasing technical requirements of the automotive industry.
- Designed to assist lubricant marketers in assuring the quality of their lubricants and ACEA performance claims being made for them in the marketplace.



EELQMS stakeholders

QUALITY ENGINE LUBRICANTS Additive Vehicle Lubricant **Test** methods: OEMs: companies: suppliers: **ATIEL** ATC CEC/ASTM **ACEA** (Oil Sequences & (Formulation (Additive (Engine and Specifications) guidelines & best bench testing) packages) practices) **European Engine Lubricants** Quality Management System (EELQMS)

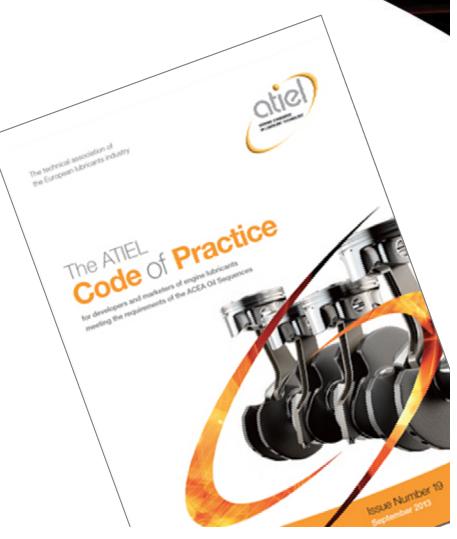
EELQMS contribution to quality

- EELQMS provides a detailed process and structure for lubricant development, production and performance validation.
- Provides assurance of the quality of engine lubricants on the market that claim to meet the performance requirements of ACEA.
- A voluntary system but the <u>ONLY</u> system that can be used to qualify engine lubricants against ACEA Oil Sequences.
- The ATIEL Code of Practice is a key element of the EELQMS.



The ATIEL Code of Practice

- Has provided guidelines to help formulators and marketers in the development of lubricants that meet ACEA performance requirements since 1996.
- Has evolved in line with ACEA
 Oil Sequences and is currently on Issue 19.
- Available from the ATIEL website: www.atiel.org



Code of Practice - best practice guidelines

Provides guidelines that:

- Enable lubricant companies to comply with the requirements of the ACEA Oil Sequences.
- Represent accepted industry best practices.
- Offer a common approach and standards for the whole industry to follow.
- Give reassurance to OEMs and end-users of the quality and consistency of Lubricants making ACEA performance claims.



Marketing

Compliance with the Code of Practice includes signing a Lubricant Marketers' Letter of Conformance:

Required for ACEA performance claims

Confirms compliance with EELQMS

Signed Letters held by ATIEL

List of signatories on ATIEL website

Renewed every two years

Membership of ATIEL is not required to be a signatory

Letter of Conformance template available from ATIEL website: www.atiel.org





Summary of stakeholder benefits

OEMs

- Controlled and consistent quality of engine lubricants
- Wide availability of lubricants meeting ACEA requirements
- Protection against warranty claims



End user

- Trouble-free operation
- Confidence in lubricant performance claims
- Wide availability of lubricants of appropriate quality

Lubricant and additive industry

- Timely, cost-effective engine lubricant development
- Common approach & standards (level playing field)
- Formulation optimisation and controlled flexibility



ATIEL Quality Survey

- In July 2013 ATIEL conducted its first engine lubricants quality survey.
- Surveys are one of the most effective ways to demonstrate compliance.
- As a result has become a regular activity and a core part of overall quality management initiatives.





Independent quality survey

- Paid for by ATIEL members but conducted by independent body.
- Over 200 engine lubricant samples from ATIEL members purchased from outlets across Europe.
- All ATIEL members represented in the sample.
- Covered a range of common viscosity grades and quality levels.



Purpose of the quality survey?

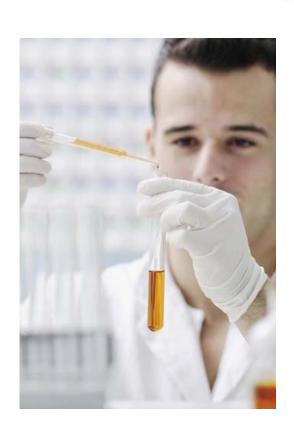
- To establish a base line for compliance with ACEA requirements in Europe.
- To replicate to some extent best practice from other markets (eg API programme in North America).
- Test validity of anecdotal evidence of inaccurate performance claims of some lubricants on the market.
- Visible demonstration of the benefits of full adoption and application of the EELQMS.
- To enhance the overall robustness of quality management system activity.





Quality survey methodology

- All samples sourced completely independently, coded and 'blind' tested.
- Tested against most appropriate standards
 ACEA European Oil Sequences 2008.
- Testing covered key performance parameters including:
 - Viscosity (high and low temp)
 - Noack volatility
 - SAPS (Sulphated Ash, Phosphorous & Sulphur)
 - TBN (Total Base Number)
- Testing and statistical analysis conducted by independent expert laboratory.





1st quality survey results

- Not a totally scientific study but a way to 'test the water' and gain learnings.
- Overall level of compliance encouraging but some issues raised.
- No serious quality issues identified.
- Individual results shared only with respective marketer and appropriate follow-up actions taken.



Quality surveys: ongoing activity

- Quality survey will become a regular, annual ATIEL activity.
- Second survey conducted in 2014 covering broader range of products.
- Extended to cover Letter of Conformance signatories (ie beyond ATIEL membership).
- Baseline and methodology will develop and results become more meaningful over time as more data gathered.





Conclusion

- The EELQMS and ATIEL's Code of Practice benefit all stakeholders:
 - OEMs

- \checkmark
- Lubricant companies
- **V**
- Additive companies
- \checkmark

Workshops

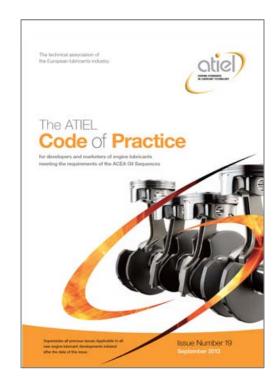
V

Consumers

 \checkmark

Base oil suppliers







Thank you!

For more information and to download a copy of our Code of Practice visit: www.atiel.org

Contact us at: info@atiel.eu