



CIMCAC Working Groups

**Brief Report
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WG 2: Classification Societies (Hansen)



⇒ Vision

- Discuss and approve new Unified Class Rules with IACS
- Adjust the existing class rules to comply with technical developments
- Joint meetings with IACS WP Machinery Panel to exchange views and thereby contribute to both theoretical and practical inputs to Class Rules
- Co-ordinate CIMAC WG2, 4, 14, 15 and 18 inputs to IACS WP Machinery Panel
- Prepare CIMAC publications

⇒ Activities 12 months

- Subgroups for IACS UR M50, IACS UR M51 and IACS UR 44
- Validity and mutual accept of class certificates
- Spare parts for two-stroke engines
- ★ → Certification of tools for I. C. Engines
- ★ → Joint meetings with all the Classification Societies (IACS Machinery Panel) per year with chairman participation from WG 4, 14, 15 and 18

WG 2: Classification Societies (Hansen)



⇒ Future

- ★ → Supported by and together with CIMAC Central Secretariat we try to get CIMAC in Korea and China involved in the group work
- ★ → Target date for publication within 12-18 months

WG 4: Crankshaft Dimensions (Savolainen)



⇒ Vision

- To update the current dimensioning rules to a modern level

⇒ Activities

- Modification proposals to the base M53 in order to notice the proposed appendices
- Guidance on surface treated fillets and oil bore outlets, to be included in the M53
- Comparison of multiaxial fatigue criteria
- Methods to improve accuracy of stress calculation (Multibody Dynamic Simulation & FEM).
- Fatigue analysis based on probability theory

⇒ Future

- ★ → Publishing: "Guidance on surface treated fillets and oil bore outlets" during 2010/2011

WG 5: Exhaust Emission Control (Hellén)



⇒ Vision

- The aim of the working group is to discuss and contribute in an international, cross-industry forum to the implications arising from exhaust emissions as applied to the marine industry and land-based power plants
- Commenting and influencing diesel and gas engine exhaust emission issues for land-based power plants.

⇒ Activities

- Follow -up on marine and power plant emission regulatory developments: IMO, US-EPA, Asia, CARB, EU, River Rhine, World Bank, etc.
- Check of own NOx calculation (IMO Technical Code 2008)
- ★ → Publication: “Prime mover Technique Specific Emission limits – Stationary Reciprocating Engine plant”

⇒ Future

- Follow-up on latest regulatory developments
- ★ → Review of results - check of own NOx calculations

WG 7: Fuels (Aabo)



⇒ Vision

- To make tools for the industry by following the development of the market, working in specialist groups and consulting outside specialists within fuel oils.

⇒ Activities

- Continuous focus on: Low sulphur fuel, combustion properties, grade rationalizing, bio fuels, fuel quality
- Support the ISO 8217 fuel standard group
- ★ → WG title „Heavy Fuel” changed to „Fuels”

⇒ Future

- Paper No 21: “Recommendations regarding Fuel Quality for Diesel Engines” and No 25 “Recommendations concerning the Design of Heavy Fuel Treatment Plants for Diesel Engines”
- ★ → Coordination with sister WG in CIMAC such as USERS, Lube Oil and Emission

WG 8: Lubricants (Gehring)



⇒ Vision

- To combine the expertise for giving recommendation to the industry and others interested (operators, students, etc.)
- To be a forum for discussing actual evolutions related to engine lubricants and for exchanging experience and opinions between the WG members

⇒ Activities

- ★ → Subgroup “Flash Point” gathered information about flash point of the lube oil and crankcase explosions. Results will be presented at the common WG-Meeting in Bergen for receiving input from other WGs
- ★ → Subgroup “Used oil analysis guide” has finished the draft documentation. Draft will be discussed with the WG and then published as a CIMAC recommendation
- ★ → Another Subgroup is updating the recommendation No 15 (two-stroke engine lubrication)

⇒ Future

- ★ → Next meeting in September 2010
- ★ → Exchange of information between WGs has been improved (exchange of MoM between Fuels, Lubricants, Emission) but could be improved further

WG 10: Users (Hansen)



⇒ Vision

- To provide a forum to intensify the dialogue between engine users and manufacturers

⇒ Activities

- ★ → Finalised complete revised version of CIMAC WG 10 USER Data Bank Manual and Data Collecting Software

⇒ Future

- ★ → WG 10 User annual meetings reduced due to present shipping market commercial situation
- ★ → Next steps: Upgrading CIMAC WG 10 USER Analysing abnormal cases

WG 15: Electronics & Software Systems (Boom)



⇒ Vision

- Reliability and safety of engine electronic components and engine automation systems
- Supervise/assist the implementation of the new technologies

⇒ Activities

- ★ → Progress from IACS on M3 input has been poor. Plan for improving engagement with IACS
- ★ → Identified the key improvement areas for the FMEA activities
- ★ → IEC61508 is keeping the WG15 members busy. Large engine industry is not complying with IEC61508

⇒ Future

- ★ → Clarify action for large engine compliance with IEC61508 requirements
- ★ → CIMAC Board & Council are asked for **advice** on how to deal with the IEC61508 topic

WG 16: Auxiliary Systems (Deichmann)



⇒ Vision

→ CIMAC recommendation on auxiliary systems

⇒ Activities

→ No meetings since end 2007

⇒ Future

★ → The group suggests to dissolve itself. *Decision* to be taken by the CIMAC Council

WG 16: Closed



WG 17: Gas Engines (Nerheim)

⇒ Vision

- All aspects of gas engine technology within exhaust emissions, performance definition, application and safety as well as gas quality

⇒ Activities

- ★ → Frankfurt meeting: Good update on gas activities in the industry
- ★ → Next Position Papers with subjects:
 - Transient response capability of gas engines, CH₄ and formaldehyde emissions
 - Balance between efficiency and emissions in gas engines*Drafts however to be simplified*

⇒ Future

- The next meeting is planned for November 2010
- ★

WG 18: Engine Room Safety (Besau)



⇒ Vision

- To have power available under all circumstances in case of engine room fire, based on precise detection and monitoring (alarms) and if necessary, efficient and rapid firefighting in a very early state

⇒ Activities

- 5 meetings since establishment in 2007
- Problem with scattered participation and crisis situation

⇒ Future

- ★ → Progress report was expected in May 2010 – however no information received