

Regulatory Developments in China

CIMAC WORKING GROUP 5 “EXHAUST EMISSION CONTROL”
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1. Update of the emission regulations

表 2 船机排气污染物第二阶段排放限值 the second stage limits

船机 类型	单缸排量 (SV)(L/缸)	额定净功率 (P) (kW)	CO (g/kWh)	HC+NO _x (g/kWh)	CH ₄ ⁽¹⁾ (g/kWh)	PM (g/kWh)
第 1 类	SV<0.9	P≥37	5.0	5.8	1.0	0.3
	0.9≤SV<1.2		5.0	5.8	1.0	0.14
	1.2≤SV<5		5.0	5.8	1.0	0.12
第 2 类	5≤SV<15	P<2000	5.0	6.2	1.2	0.14
		2000≤P<3700	5.0	7.8	1.5	0.14
		P≥3700	5.0	7.8	1.5	0.27
	15≤SV<20	P<2000	5.0	7.0	1.5	0.34
		2000≤P<3300	5.0	8.7	1.6	0.50
		P≥3300	5.0	9.8	1.8	0.50
	20≤SV<25	P<2000	5.0	9.8	1.8	0.27
		P≥2000	5.0	9.8	1.8	0.50
	25≤SV<30	P<2000	5.0	11.0	2.0	0.27
		P≥2000	5.0	11.0	2.0	0.50
(1) 仅适用于 NG (含双燃料) 船机。						

- GB 15097-2016 Limits and measurement methods for exhaust pollutants from marine engines (CHINA I, II)
- Second stage Execution date: July 1, 2021
- Many engines have got CN II certifications.
- Methane limit is still not implemented.

2. Rules & Guidelines



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船舶应用甲醇/乙醇燃料指南 2022

2022 年 7 月 1 日生效
北京

指导性文件
GUIDANCE NOTES
GD16-2022

- CCS issued “Guidelines for Methanol / Ethanol powered ships Inspection” in June 2022. It was effective from July. 1, 2022.
- The Guidelines for the Application of Methanol/Ethanol Fuel in Ships is applicable to steel or equivalent metal ships with a captain of 20 m or more who use methanol/ethanol as fuel or preset methanol/ethanol fuel power system.

source of the information : China Classification Society web

2. Rules & Guidelines



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指导性文件
GUIDANCE NOTES
GD15-2022

船舶应用氨燃料指南 2022

2022 年 7 月 1 日生效
北京

■ CCS issued “Guidelines for the application of ammonia fuel in ships” in June 2022. It was effective from July. 1, 2022.

■ The Guidelines for the Application of Ammonia Fuel in Ships is applicable to steel or equivalent metal ships with a captain of 20m or more who use ammonia as fuel or preset ammonia fuel power system, except for liquefied gas carriers.

source of the information : China Classification Society web

2. Rules & Guidelines



中国船级社

船舶应用燃料电池发电装置指南 2022

2022 年 7 月 1 日生效

北京

指导性文件
GUIDANCE NOTES
GD14-2022

- CCS issued “Guide for Marine Fuel Cell Power Generation Devices” in June 2022. It was effective from July. 1, 2022.
- When hydrogen is used as the primary fuel, the ship layout, materials, pipeline design, fuel storage, refueling, supply and use, electrical, ventilation, fire protection and monitoring and other technical requirements, drawings and inspection requirements shall comply with the relevant requirements of this Guide.

source of the information : China Classification Society web

2. Rules & Guidelines



- China MSA issued “Interim Rules for the Technology and Inspection of a Hydrogen Powered Ships” in March 2022. It was effective from March 3, 2022.
- Rules are applicable to domestic steel ships with a length of 20m and above, using hydrogen fuel cell as the main propulsion power source.

source of the information : Maritime Safe Administration of the People's Republic of China web

Summary

1. The second phase of GB15097 has come into force and the methane limit of GB15097 still not implemented.
2. The CCS's new specifications and guidelines promoted low and zero carbon fuels transformation of ship engines, such as Methanol / Ethanol, Hydrogen , ammonia.

Thank you for your attention!

