What is "JICEF"





Japan Internal Combustion Engine Federation (JICEF)

Outline of JICEF – Objective



JICEF contributes to the promotion of Japan's internal combustion engine industry by the following activities.

- ➤ Businesses activities related to the International Council on Combustion Engines (CIMAC, Conseil International des Machines a Combustion (Fr))
- ➤ Cooperation with the Japan Industrial Standards Committee on the Technical Committee on Internal Combustion Engines of International Organization for Standardization [ISO / TC70 (reciprocating engines) and ISO / TC192 (gas turbines)] in the work of the International Organization for Standardization
- ➤ Other business activities related to internal combustion engines that are deemed necessary to be conducted by JICEF in addition to the above

Outline of JICEF – Activity Summary



Name: Japan Internal Combustion Engine Federation

(abbreviation, JICEF)

Establishment: 12th February, 1954

Main activities:

CIMAC-related activities

Standardization activities

Dissemination and PR activities

Chairman: Yasuyuki Takahata

Member: 69 (48 member corporations, 21 member

associations), as of December, 2023

Business Summary – CIMAC-related Activities



CIMAC(The International Council on Combustion Engines)

CIMAC was Established in 1951 under the proposition of France (the secretariat was then Paris) as international organization on internal combustion engines. As of April 2022, it consists of members of the national unit (NMA) of 15 countries and 14 corporate members (CM) from 8 countries. The secretariat is located in Frankfurt, Germany. JICEF is its representative organization in Japan and operates the following CIMAC activities in Japan.

- The most important decision-making body of CIMAC is the Council of Trustees, which is composed of up to two members from each NMA and members of each country's representative body.
- ➤ The Board of Directors is the central body of the Board of Trustees, and consists of 12 members, the President, Vice President (nine members), the former President and the Secretary-General. Yasuyuki Takahata is currently working as Vice President from Japan.
- Business Activities
 - ✓ Recently, they hold congresses on a rotating basis every three years, publish useful papers from each country, and hold discussions.
 - ✓ Technical committee to plan paper presentations, poster sessions, etc., and review technical papers at CIMAC Congress
 - Representatives from Japan also participate in the Session Organizers Meeting for submitted papers
 - ✓ Working group to conduct research and create standards on internal combustion engines (WG: 11WGs as of December 2023)

A mirror WG has been set up for each CIMAC WG in Japan, and the leaders from Japan have been dispatched to international meetings to conduct research and discuss on important issues and standards.

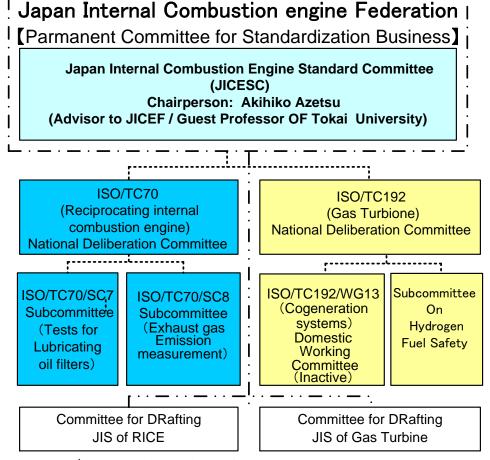
Business Summary – Standardization Activities



In the standardization business, we are deliberating and drafting ISO and JIS standards for drafting standards in ISO / TC70 (reciprocating internal combustion engine) and ISO / TC192 (gas As of 31st December, 2023 turbine). (See organization chart)

- **Internal Combustion Engine Standardization Committee has** been set up, and the duties of the Japanese counterparts and the secretariat of the National Countermeasures Committee (corresponding domestic deliberative bodies) are entrusted by Industrial Science Technology and Policy and Environment Bureau of Ministry of Economy, Trade and Industry through the Japanese Standards Association. The Committee compiles domestic opinions on ISO standards for internal combustion engines, and dispatches Japanese representatives to international meetings to deliberations on ISO standards.
- Investigating the draft of Japanese Industrial Standards (JIS) for internal combustion engines, commissioned by Industrial Science and Technology Policy and Environment Bureau of Ministry of Economy, Trade and Industry* and the Japanese Standards Association, and in particular, drafting drafts of domestic standards consistent with international standards.

[*: Former the Mechanical Engineering Laboratory, Agency of Industrial Science and Technology, Ministry of International Trade and Industry



(Committee for Drafting JIS-related is set up in a single year for each theme in the required year). Committee Organization

Business Summary – Dissemination and PR Activities



JICEF will widely inform members and stakeholders of the status and achievements of the Federation, the world's latest information on reciprocating internal combustion engines and gas turbines, and the international situation through the following.

Technology promoting and public relations activities for members and internal combustion engine related personnel

- Holding of Seminars hosted by JICEF
- Publication and distribution of "Information of JICEF" as an institutional newspaper
- Distribution of CIMAC-related materials and technical materials such as materials obtained at international meetings

History 1



	Engine recentation
Year	Main Advances
1951	With the proposition of France, CIMAC (The International Council on Combustion Engines) was established and CIMAC Secretariat was set up in Paris.
1952	Japan Land Engine Manufacturers Association joined CIMAC in April, and in September of the same year, Mitsuyoshi Inao was requested by the CIMAC Secretariat to participate in CIMAC Congress on a business trip to Europe.
1954	On February 12, the General Assembly of the Japan Internal Combustion Engine Federation was held at the Japan Restaurant in Shinbashi Station. The office was located in Production Engineering Association of Nissan Building in Tamura-machi, Minato-ku. Then, JICEF became the representative organization of CIMAC in Japan.
1955	Participated in 3 rd CIMAC Congress held in Hague for the first time from Japan
1969	In response to ISO/TC70, the ISO Internal Combustion Engines Committee (Chairman Ichiro Kondo) was established, and the secretariat was located in the JICEF office.
1970	The JICEF office was moved from Production Engineering Association to Japan Land Engine Manufacturers Association in Ichigaya, Shinjuku-ku.
1971	Masaaki Kawada has been appointed chairman of ISO Internal Combustion Engine Committee.
1973	JICEF and the ISO Internal Combustion Engine Committee merged, changing the chairman system to a president system and two vice presidents were appointed. In ISO, gas turbine related became ISO/TC70/SC6.
1974	The 20th anniversary celebration of JICEF was held at the Industrial Club of Japan, and the 20 years history of JICEF was published. International Meeting of ISO/TC70/SC4 and SC5 was held at Keidanren Kaikan in Tokyo.
1975	The JICEF office has been moved from Japan Land Engine Manufacturers Association to the Yoshino Building in Shinbashi, Minato-ku.
1977	The 12th CIMAC Congress Tokyo was held at the Tokyo Prince Hotel with His Highness Takamatsu. The total number of participants reached about 700, which was a great achievement. JICEF News (now Information of JICEF) No. 1 was published.
1979	International Meetings on ISO/TC70/SC1, SC4 and SC5 were held at Keidanren Kaikan in Tokyo. JICEF Vice President Masutaro Shibata has been appointed Vice President of CIMAC.
1984	The 30th anniversary celebration of JICEF was held at the Industrial Club of Japan, and the 30 years history of JICEF was published.
1985	JICEF advisor Isamu Yamashita took up the post of ISO President. Vice President Masutaro Shibata assumed the post of CIMAC President (until 1987).
1988	ISO gas turbines have been spun off from ISO/TC70/SC6 to become the new ISO/TC192. A Domestic Deliberation committee has also been set up.
1989	Kiyoshi Imai has been appointed chairman of the ISO Internal Combustion Engine Committee. From October, CIMAC Secretariat moved from Paris to London (UK).
1990	International Meetings on ISO/TC70/SC1, SC2, and SC5 were held at the Kikai Shinko Kaikan in Tokyo.
1992	International Meetings on ISO/TC70/SC8 were held at Komatsu Training Center in Oyama City, Tochigi Prefecture.
1993	JICEF Vice President Chiaki Aoki has been appointed CIMAC Vice President.

History 2



Year	Main Advances
1994	The 40th anniversary seminar, ceremony and celebration of JICEF were held at the Industrial Club of Japan, and the 40 years history of JICEF was published.
1995	International Meetings of ISO/TC70/SC8/WG2, WG1 were held at Kuramae Technical Hall in Tokyo.
1996	The CIMAC Secretariat moved from London to Frankfurt (Germany) in January. International Meetings of ISO/TC192/JWG4, WG6 were held at Kuramae Technical Hall in Tokyo.
1998	Chiaki Aoki has retired from CIMAC Vice President, and Tomohiro Honma has been appointed CIMAC Vice President.
2000	Chiaki Aoki has been appointed chairman of the ISO Internal Combustion Engine Committee.
2001	Tomohiro Honma has retired from CIMAC Vice President, and Keijiro Tayama has been appointed CIMAC Vice President.
2002	In August, the JICEF Office was relocated from the Yoshino Building in Shinbashi, Minato-ku to the Kimura Building in Shinbashi, Minato-ku.
2004	The 24th CIMAC Congress Kyoto was held at the Kyoto International Conference Hall. The total number of participants exceeded 1200, including exhibitors, and achieved significant results.
2005	The 50th anniversary seminar and celebration of JICEF was held at the Industrial Club of Japan. International Meeting of ISO/TC70/SC8 was held at Toshi Center Hotel in Tokyo. Keijiro Tayama has retired from CIMAC Vice President, and Yasuhiro Itoh has been appointed CIMAC Vice President.
2007	In December, an International Meeting on ISO/TC192/WG13 was held at Keio Plaza Hotel in Tokyo.
2009	The name of the ISO Internal Combustion Engine Committee was changed to Internal Combustion Engine Standardization Committee, and Tsuneo Someya was appointed chairman.
2010	Vice President Yasuhiro Itoh assumed the post of 20th CIMAC President (until 2013).
2010	Hosted by JICEF, the 1st CIMAC Far East NMA Meeting was held at JICEF Office in Tokyo.
2011	The 2nd CIMAC CASCADES seminar was held at the National Museum of Nature and Science, Ueno.
2013	Hosted by JICEF, the 4th CIMAC Far East NMA Meeting was held at Conference Room of Nagasaki Shipyards, Mitsubishi Heavy Industries in Nagasaki. International Meetings on ISO/TC70 and TC70/SC8 were held at the Kikai Shinko Kaikan in Tokyo.
2016	After the CIMAC Helsinki Congress, Yasuyuki Takahata assumed the post of CIMAC Vice President. In August, JICEF office was moved from the Kimura Building in Shinbashi, Minato-ku to the Uchida Building in Shinbashi, Minato-ku.
2018	The 10th CIMAC CASCADES Seminar was held at Kobe Portopia Hotel in Kobe by JICEF and Yanmar as hosts.
2019	Hosted by JICEF and IHI Power Systems, the 10th CIMAC Far East NMA Meeting was held at Conference Room of Niigata Internal Combustion Engine Plant, IHI Power Systems in Niigata.

Business Activities – Regular Meetings • CIMAC WG



Regular Meetings

✓ Steering Committee Meetings (twice a year): Spring, Autumn

✓ Board and General Meeting (once a year): basically July

CIMAC WG

✓ Mirror Groups Leaders' Meeting (twice a year) February,

✓ Each Mirror Group Meeting (basically twice a year)

✓ International Meetings(basically twice a year)

✓ WG10 "Users" International Meetings







General Meeting

Appearance of General Assembly and Board

February, September

between the CIMAC WG (international) by JICEF Members)

Spring, Autumn(mirror group leaders participate)

Participation from shipping companies





Appearance of WG7 Mirror Group Meeting

Business Activities – CIMAC WG



Research and discuss themes approved by the Council meeting, exchange information and publish their results in the form of Reports, Recommendations, and Position Papers. Members are CIMAC members.

The JICEF basically has each Mirror Group Meeting for WG, and holds a biannual Mirror Groups Leaders' Meeting to exchange information between WGs. (Chair of Mirror Groups Leaders' Meeting: Yasuyuki Takahata / Yanmar)

WG No.	Working Group	Mirror Groups Leaders
2	Classification	Tomohiro Mitsukiyo(Mitsui E&S)
4	Crankshaft Rules	Kenichiro Hirao(Kobe Steel)
5	Exhaust Emission Control	Junichi Sato (IHI Power Systems)
7	Fuels	Atsushi Takeda (Nippon Yuka Kogyo)
8	Marine Lubricants	Keisuke Shimokawa (Daihatsu Diesel MFG)
15	Controls and Automation	Makoto Ideguchi (Nabtesco Corporation)
17	Gas Engines	Sadao Nakayama (IHI Power Systems)
19	Inland Waterway Vessels	Yoshinori Sasaki (YANMAR Power Technology CO., LTD.)
20	System Integration	Keitaro Hironaka (IHI Power Systems)
21	Propulsion	Takuro Hatamoto (IHI Power Systems)

Business Activities – CIMAC Congress (2023 Busan)



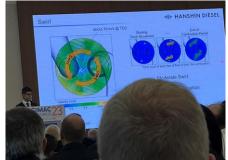






Collin Trust Sponsored Keynote Speech

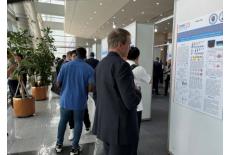




Panel Discussion

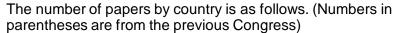


Paper Presentation





Poster Sessions Closing Ceremony



	٦	otal P	aper l	Prese	ntation	า* P	oste	r
China	6	7 (50))	42	(24)		25	(26)
Germany	33	(44)	31	(42)	2	(2)		
Japan	20	(35)	19	(24)	1	(11)		
Austria	18	(15)	18	(15)	0	(0)		
USA	17	(25)	14	(23)	3	(2)		
Switzerland	16	(28)	16	(27)	0	(1)		
Finland	10	(22)	9	(18)	1	(4)		
Denmark	10	(9)	8	(8)	2	(1)		
UK	10	(8)	8	(5)	2	(3)		
South Korea	8	(6)	5	(3)	3	(3)		
*including Spe	aker	s Corn	er and	d Pitch	Stage)		



Business Activities – CIMAC CASCADES



CIMAC CASCADES is named from the following:

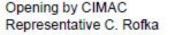
CAse Studies in Combustion engine Applications and Design ExperienceS - Seminar for Younger Engineers -

- Aim: → To present case studies from latest development projects in a dedicated field
 - → To offer networking possibility for younger engineers
 - → To train younger engineers about management tools (e.g. project management)
 - \rightarrow To show these tools on the basis of concrete projects / cases in companies
 - → To inspire students for large engine branch
 - → To give publicity to CIMAC, the partner National Member Association and the sponsors

Holding: Held twice a year without CIMAC Congress (Spring / Autumn) and once a year with the Congress (Autumn) (Initially once a year without CIMAC Congress)

The 12th CIMAC CASCADES Graz







Keynote by G. Stiesch MAN Energy Solutions



Auditorium (& Video Conference) 5 Alternative Fuels, 2 Digitalization and 2 Hybridization presentations

Simon Pöllmann -



Best Paper Award

12

(CASCADES Busan postponed due to COVID-19)

Progress of the event

No.	Date	Venue	Thema		
1	2009.11.26	Hamburg, Germany	Fuel Injection & Fuels "with Focus on Case Studies of Real Projects"		
2	2011.11.17	Tokyo, Japan	IMO Tier III – Gas or Aftertreatment?	9	
3	2012.06.07~08	Zurich, Switzerland	Towards the Elastic Engine: Developing Major Engine Systems		
4	2014.03.14	London, England	Fuel Efficiency – Are Improvements Possible? in the Digital Electronic Age		
5	2014.10.22~24	Busan, Korea	Gas Engines? – The Visible Alternative for ECAs	1	
6	2015.02.26~27	Graz, Austria	Dual Fuel and Gas Engines – Their Impact on Application, Design and Components		
7	2015.10.15~16	Hangzhon, China	Power for Inland, Coastal and Offshore Shipping, Dual Fuel or Gas Engine?		
8	2017.05.04~05	Helsinki, Finland	Smart, Clean and Efficient Energy Conversion Solutions		
9	2018.02.22~23	Texas, USA	Challenges with Natural Gas Rail and Marine Fuel		
10	2018.10.11~12	Kobe, Japan	Diverging Technologies Aiming for Zero Environmental Impact		
11	2019.10.10~11	Wuxi, China	Low carbon, High efficiency, System, Integration	ı	
12	2021.09.22	Graz, Austria	On the Way towards De-Carbonization	(C	
13	2020.10.15~16	Busan, Korea	New Technology for next generation	dι	

Business Activities – CIMAC Far East NMAs Meeting



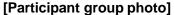
The CIMAC Far East NMAs Meeting was started in November 2010 under the leadership of CIMAC Chairman Mr. Ito (at that time) with the host country holding a meeting by rotation once a year to revitalize CIMAC activities from Far East.

In particular, it was expected to actively participate in and contribute to CIMAC activities by Korea, the world leader in marine engine production, and China, experiencing remarkable growth. The progress of the event to date is as follows.

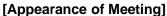
No.	Schedule	Venue	Organizers
1	11 th Nov., 2010	Tokyo, Japan	JICEF
2	18 th Aug., 2011	Qingdao, China	CSICE*1/QMD*2
3	15 th Jul., 2012	Ulsan, Korea	KOFCE*3/HHI*4
4	2 nd ~ 4 th Oct., 2013	Nagasaki, Japan	JICEF
5	15 th ~ 17 th Jan., 2015	Chongqing, China	CSICE
6	16 th ~ 18 th Jul., 2015	Mokpo, Korea	KOFCE/MNMU*5
7	6 th ~ 8 th Oct., 2016	Nagahama, Japan	JICEF/Yanmar
8	12 th ~ 14 th Oct., 2017	Xhaoxing, China	CSICE/SMDERI*5/Ningbo C.S.I./Ningbo Rake Forester
9	4 th ~6 th Jul., 2018	Seoul, Korea	KOFCE/MNMU
10	16 th ~18 th Oct., 2019	Niigata, Japan	JICEF/IHI Power Systems
11	14 th ~16 th Oct., 2020	Busan, Korea	KOFCE

10th CIMAC Far East NMAs Meeting

- 1 Opening of the Meeting
- 2 Welcome speech from JICEF Greeting from CIMAC President
- 3 Appointment of chairperson
- 4 Adoption of Agenda of the 10th CIMAC Far East NMAs Meeting
- 5 Confirmation of the Minutes of the Last Meeting
- 6 Activities of NMAs
 - 1) Report by JICEF
 - 2) Report by CSICE
 - 3) Report by KOFCE
- 7 CIMAC WGs activities & attendants in 2018 & 2019
 - 1) Report by JICEF (All WGs)
 - 2) Report by CSICE (WG19)
- 8 Discussion on the contribution of China and Japan to the 30th CIMAC Congress held in Busan
 - 1) Experience of CSICE
 - 2) Experience of JICEF
- 9 CIMAC Events 2019 2020
- 10 Date & venue of the next meeting
- 11 Closing Speech from each NMA representative











[Factory tour]



[Greeting of CIMAC President Jin]





[Histrical & Culture Tour]



Explanation of pumping power station

(The 11th meeting was postponed due to COVID-19.)

Business Activities – ISO-JIS Committee



- ➤ ISO/TC70 (reciprocating engines) and ISO/TC70/SC8 (reciprocating engines exhaust emission measurement) International Meetings
 - Members of the Domestic Deliberation Committee attends the annual international meetings on reciprocating internal combustion engines and exhaust emission measurement, and are working to reflect the deliberation results of the Domestic Deliberation Committee on ISO standards.
- ➤ ISO/TC70/SC7 (reciprocating engines tests for lubricating oil filters) International Meetings
 - Lubricating oil filter testing is entrusted to the Filter Technology Subcommittee of Japan Auto Parts Industries Association (JAPIA) to deliberate the draft standard, and the ISO Subcommittee International Meetings are attended by this subcommittee.
- > ISO/TC192(gas turbines)
 - Domestic deliberations are discussing issues related to gas turbine safety, exhaust and heat recovery unit specifications, and gas turbine procurement specifications that are currently being revised and discussed. They are working to reflect the results of the deliberations in ISO standards.
- Domestic Standardization Business

JIS drafting committees for reciprocating internal combustion engines and gas turbines have been set up separately to ensure consistency with ISO and contribute to drafting JIS.



TC Plenary attendees



Meeting scenery ISO/TC70/SC8/WG6



Meeting scenery ISO/TC70/WG10

Business Activities – JICEF One Day Seminar



One Day Seminars held in 2019 (basically 3 times a year):

- ➤ On 16th December 2019 at Kobe (82 participants):
 - " 29th CIMAC Vancouver Congress (Highlights of Presentation Papers) Report Seminar"

One Day Seminars (Webinar) held in 2021:

- > On 17th March 2021, Webinar (100 participants):
 - "Latest information on IMO GHG Reduction Strategy Measures"
- > On 17th June 2021, Webinar (88 participants):
 - "Latest Trend of Future Diesel Engine Exhaust Emission Abatement Technologies and Regulations (other than GHG)"
- ➤ On 4th November 2021, Webinar (83 participants):
 - "Status after the Implementation of IMO Sulphur Cap 2020"

One Day Seminars (Webinar) held in 2022:

- On 15th February 2022, Webinar (119 participants):
 - "Latest Trends in Gas Engine and Dual Fuel Engine Developments"
- ➤ On 5th September 2022, Webinar (126 participants):
 - "Trends in Decarbonized Fuel Supply Chain"
- ➤ On 22nd December 2022, Webinar (70 participants):
 - "ISO/JIS Revision trends in reciprocating internal combustion engine exhaust emission measurements"

One Day Seminars (Webinar) held in 2023:

- ➤ On 9th March 2023, Webinar (72 participants):
 - "Latest Trends in the Efforts of Component and Ancillary Equipment Manufacturers for the Development of Future Internal Combustion Engines"
- On 4th December 2023 at Kobe (72 participants):
 "30th CIMAC Busan Congress (Highlights of Presentation Papers) Report Seminar"







4th November, 2021



5th September, 2022



9th March, 2023



17th June. 2021



15th February, 2022



22nd December, 2022



Scene of Seminar held on 4th December, 2023

Business Activities –Information of JICEF-Engineering Journal



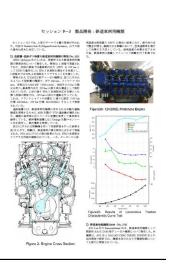
Publication and information transmission	Contents	Publication schedule
Information of JICEF	JICEF activities including CIMAC WG international meetings, ISO/JIS international meetings, etc.	published twice(2) per year, January & August
Engineering Journal	Japanese abstract translation of all papers that passed CIMAC Congress	every three years (after CIMAC Congress)
Other information related to CIMAC on JICEF website	CIMAC Position Papers, Recommendations, Technical Databases and other potentially useful information related to the industry	Each time











(Includes all reports from CIMAC WG International and CIMAC Council Meetings)

Information of JICEF

(Main part: Japanese abstract translation of all papers (presentation, pitch stage, speakers corner, poster (No. 8 : about 300 pages))

Engineering Journal

Business Activities – IICEMA



IDEMA

CICEIA

EUROMOT

In 2012, at the request of EUROMOT, nine engine associations around the world related to non-road engines established IICEMA, and currently hold international conferences every 18 months (once a year at the time of establishment). He agreed to hold regular meetings thereafter. Currently, the following 9 organizations are participating.

- The European Association of Internal Combustion Engine Manufacturers: EUROMOT(EU)
- European Garden Machinery Federation: EGMF(Belgium)
- Truck & Engine Manufacturers Association: EMA(USA)
- Outdoor Power Equipment Institute: OPEI(USA)
- Indian Diesel Engine Manufacturers' Association: IDEMA(India)
- China Internal Combustion Engine Industry Association: CICEIA(China)
- Japan Land Engine Manufacturers Association: LEMA(Japan)
- Japan Internal Combustion Engine Federation: JICEF(Japan)
- Japan Ship Machinery & Equipment Association: JSMEA(Japan)

The objective of this society is the following three points.

- 1. To enhance the working relationship and promote cooperation and information sharing among associations; including their members, representing the interests of manufacturers of nonroad internal combustion engines.
- 2. To foster the development of global policy / positions on legislative and regulatory issues regarding engine exhaust emissions, fuels, noise, safety and fuel efficiency.
- 3. To facilitate the development and implementation of cost-effective, implementable and harmonized emissions measurement techniques, test procedures, certification protocols and standards, and fuel quality specifications that enable engine improvements toward the ultimate aim of benefiting society and the environment.

Note: The 8th International Conference was postponed due to COVID-19.

No.	Schedule	Venue	Organizer
1	2012.11.13~14	Brussels, Belgium	EUROMOT
2	2013.09.09~11	Beijing, China	CICEIA
3	2014.10.20~23	Chicago, USA	EMA
4	2015.11.09~11	Tokyo, Japan	LEMA

Pune, India

History of Meetings



2017.02.06~08

2018.06.11~14

2019.12.11~12



Beijing, China

Brussels, Belgium









Scene of the 7th Beijing International Meeting

Member List



	nber Corporations (48)	NIa	
No.	name	No.	name Mitsubishi Heavy Industries Marine
1	Akasaka Diesels Limited	25	Machinery & Equipment Co., Ltd.
2	Daido Metal Co., Ltd.	26	Mitsubishi Kakoki Kaisha, Ltd.
3	Daihatsu Diesel Mfg. Co., Ltd.	27	Mitsui E & S Co., Ltd.
4	ENEOS Corporation	28	Mitsui E & S DU Co., Ltd.
5	Fuji Electric Systems Co., Ltd.	29	Mitsui E & S Systems Research Inc.
6	The Hanshin Diesel Works, Ltd.	30	Mitsui O. S. K. Lines, Ltd.
7	Hitachi Zosen Marine Engine Co., Ltd.	31	Nabtesco Corporation
8	Honda Motor Co., Ltd.	32	Nico Precision Co., Inc.
9	Horiba, Ltd.	33	Nippon Kaiji Kyokai (ClassNK)
10	ldemitsu Kosan Co., Ltd.	34	Nippon Yuka Kogyo Co., Ltd.
11	IHI Corporation	35	Nippon Yusen Kabushiki Kaisha (NYK Line)
12	IHI Power Systems Co., Ltd	36	NITTAN Corporation
13	Infineum Japan Ltd.	37	Osaka Gas Co., Ltd.
14	lseki & Co., Ltd.	38	Riken Corporation
15	Isuzu Motors Ltd.	39	Toa Koki Co., Ltd.
16	Japan Engine Corporation	40	Tokyo Gas Co., Ltd.
17	Kawasaki Heavy Industries, Ltd.	41	Tokyo Plant Co., Ltd.
18	Kawasaki Kisen Kaisha, Ltd.	42	Toshiba Energy Systems & Solutions Corporation
19	Kobe Steel, Ltd.	43	Turbo Systems United Co., Ltd.
20	Komatsu Ltd.	44	Veritas Petroleum Services (VPS)
21	KUBOTA Corporation	45	Winterthur Gas & Diesel Japan Ltd.
22	MAKITA Corporation	46	Woods Corporation
23	MAN Energy Solutions Japan Ltd.	47	Woodward Japan, Ltd.
24	Mitsubishi Heavy Industries, Ltd.	48	Yanmar Power Technology Co., Ltd.

Mer	Member Associations (21)					
No.	name		No.			
1	Advanced Cogeneration and Energy Utilization Center Japan		12	The Japa		
2	The Federation of Electric Power Companies of Japan		13	Japan So		
3	Gas Turbine Society of Japan		14	The Japa		
4	Japan Auto Parts Industries Association		15	National I		
5	Japan Construction Machinery and Construction Association		16	Nippon (J		
6	Japan Federation of Coastal Shipping Associations		17	Petroleun		
7	The Japan Gas Association		18	SHIN NIH		
8	The Japan Institution of Marine Engineering		19	The Ship		
9	Japan Land Engine Manufacturers Association		20	The Soci		
10	Japan Ship Machinery and Equipment Association		21	Thermal		
11	Japan Soceity of Naval Architects and Ocean Engineers					

No.	name
12	The Japan Society of Aeronautical and Space Sciences
13	Japan Society of Mechanical Engineers
14	The Japanese Shipowners' Association
15	National Maritime Research Institute
16	Nippon (Japan) Engine Generator Association
17	Petroleum Association of Japan
18	SHIN NIHON KENTEI KYOKAI
19	The Shipbuilders' Association of Japan
20	The Society of Automotive Engineers of Japan, Inc.
21	Thermal and Nuclear Power Engineering Society

Total members	69
Member Corporations	48
Member Associations	21



© CIMAC

JICEF is participating in CIMAC on behalf of Japan. JICEF members automatically become members of CIMAC.

You can receive various services provided by CIMAC. (Participation in WG, access to CIMAC Database, etc.)

In addition to join JICEF, thank you for your support and cooperation in the activities of JICEF.

https://www.cimac.com https://www.jicef.org

Japan Internal Combustion Engine Federation