

What is “JICEF”



Japan Internal Combustion Engine Federation (JICEF)

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.), The International Council on Combustion Engines (Eng.))**
- 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**

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: 68 (47 member corporations, 21 member associations), as of June, 2022

CIMAC(The International Council on Combustion Engines)

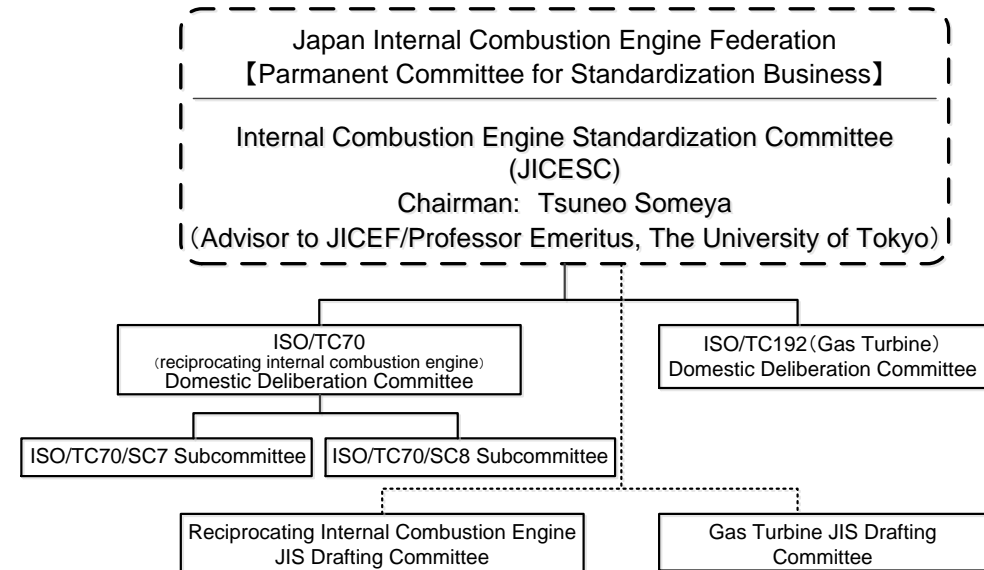
CIMAC was Established in 1951 under the proposition of France (the secretariat was then Paris) as international organization on internal combustion engines. As of April 2022, it consists of members of the national unit (NMA) of 15 countries and 20 corporate members (CM) from 12 countries. The secretariat 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 June 2022)**
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.

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 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 and Technology 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 formulate 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 Organization

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

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 24 th 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 20 th 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.

➤ 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, September
- ✓ Each Mirror Group Meeting (basically twice a year) between the CIMAC WG (international) by JICEF Members)
- ✓ International Meetings(basically twice a year) Spring, Autumn(mirror group leaders participate)
- ✓ WG10 "Users" International Meetings Participation from shipping companies



General Meeting



Chair Vice Chairman Takahata (right)



Appearance of General Assembly and Board



Appearance of WG7 Mirror Group Meeting

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 Machinery)
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	Technology for Inland Waterway Vessels	Yoshinori Sasaki (Yanmar)
20	System Integration	Hidenori Sekiguchi (National Maritime Research institute)
21	Propulsion	Takuro Hatamoto (IHI Power Systems)

Business Activities – CIMAC Congress (2019 Vancouver)



Opening Ceremony



Collin Trust Sponsored Keynote Speech



The number of papers by country is as follows. (Numbers in parentheses are from the previous Congress)

	Paper Presentation*		Poster Session	
Germany	42	(41)	2	(5)
Switzerland	27	(18)	1	(1)
China	24	(2)	26	(5)
Japan	24	(35)	11	(2)
United States	23	(8)	2	(2)
Finland	18	(31)	14	(7)
Austria	15	(14)	0	(0)
Denmark	8	(10)	1	(1)
France	6	(2)	0	(0)
United Kingdom	5	(3)	3	(4)

*including Speakers Corner and Pitch Stage



Paper Presentation



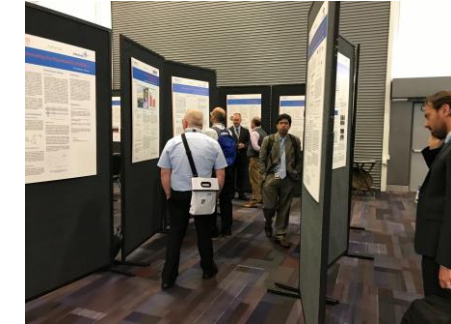
Panel Discussion



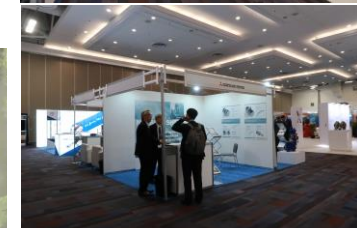
Exhibition



Poster Sessions



Closing Ceremony



Sponsors



Business Activities – CIMAC CASCADES

CIMAC CASCADES is named from the following:

Case **S**tudies in **C**ombustion engine **A**pplications and **D**esign **E**xperiences - 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)
- 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)

Progress of the event

The 12th CIMAC CASCADES Graz



Opening by CIMAC
Representative C. Rofka



Keynote by G. Stiesch
MAN Energy Solutions



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



Best Paper Award

(CASCADES Busan postponed
due to COVID-19)

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?
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
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
12	2021.09.22	Graz, Austria	On the Way towards De-Carbonization
13	2020.10.15~16	Busan, Korea	New Technology for next generation

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/MNMMU*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/MNMMU
10	16 th ~18 th Oct., 2019	Niigata, Japan	JICEF/IHI Power Systems
11	14 th ~16 th Oct., 2020	Busan, Korea	KOFCE

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

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

[Greeting of CIMAC President Jin]



[Appearance of Meeting]



[Participant group photo]



[Factory tour]



[Historical & Culture Tour]



Explanation of pumping power station

➤ **ISO/TC70 (reciprocating engines) and ISO/TC70/SC8 (reciprocating engines - exhaust emission measurement) International Meetings**

Members of the Domestic Deliberation Committee attend 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 26th September 2019 at Tokyo (91 participants):
“Development Trends and Latest Information on Automatic Operation and Autonomous Operation”
 - When can automatic and autonomous operations be realized? What is the response of classification societies, shipping companies, engine manufacturers and research institutions? -
- On 16th December 2019 at Kobe (82 participants):
“29th CIMAC Vancouver Congress (Highlights of Presentation Papers) Report Seminar”
 - Global internal combustion engine technology development trends related to fuel, environment and digitalization -

One Day Seminars (Webinar) held in 2021:

- On 17th March 2021, Webinar (100 participants):
“Latest information on IMO GHG Reduction Strategy Measures”
 - Measures to reduce GHG are fuel, battery, renewable energy ...? -
- On 17th June 2021, Webinar (88 participants):
“Latest Trend of Future Diesel Engine Exhaust Emission Abatement Technologies and Regulations (other than GHG)”
 - Exhaust Emission Abatement Measures other than GHG such as NOx Tier III Regulation, PM and black carbon? -
- On 4th November 2021, Webinar (83 participants):
“Status after the Implementation of IMO Sulphur Cap 2020”
 - What are the Problems Caused by Fuel Oil and the Procurement of Compliant Fuel oils? –

One Day Seminars (Webinar) held in 2022:

- On 15th February 2022, Webinar (119 participants):
“Latest Trends in Gas Engine and Dual Fuel Engine Developments”
 - What are your efforts to realize Decarbonization? –
- On 5th September 2022, Webinar (126 participants):
“Trends in Decarbonized Fuel Supply Chain”
 - The latest Information on Hydrogen, Ammonia and Biofuel Supply Chains –



Scene of Seminar held on
26th September



17th March, 2021



4th November, 2021



5th September, 2022



17th June, 2021



15th February, 2022

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

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(Includes all reports from CIMAC WG International and CIMAC Council Meetings)	(Main part: Japanese abstract translation of all papers (presentation, pitch stage, speakers corner, poster (No. 8 : about 300 pages))
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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.

History of Meetings

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
5	2017.02.06~08	Pune, India	IDEMA
6	2018.06.11~14	Brussels, Belgium	EUROMOT
7	2019.12.11~12	Beijing, China	CICEIA



Scene of the 7th Beijing International Meeting

Member List

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

Member Associations (21)			
No.	name	No.	name
1	Advanced Cogeneration and Energy Utilization Center Japan	12	The Japan Society of Aeronautical and Space Sciences
2	The Federation of Electric Power Companies of Japan	13	Japan Society of Mechanical Engineers
3	Gas Turbine Society of Japan	14	The Japanese Shipowners' Association
4	Japan Auto Parts Industries Association	15	National Maritime Research Institute
5	Japan Construction Machinery and Construction Association	16	Nippon (Japan) Engine Generator Association
6	Japan Federation of Coastal Shipping Associations	17	Petroleum Association of Japan
7	The Japan Gas Association	18	SHIN NIHON KENTEI KYOKAI
8	The Japan Institution of Marine Engineering	19	The Shipbuilders' Association of Japan
9	Japan Land Engine Manufacturers Association	20	The Society of Automotive Engineers of Japan, Inc.
10	Japan Ship Machinery and Equipment Association	21	Thermal and Nuclear Power Engineering Society
11	Japan Socieity of Naval Architects and Ocean Engineers		

Total members	68
Member Corporations	47
Member Associations	21



INTERNATIONAL COUNCIL
OF AUTOMOTIVE MANUFACTURERS

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>

JICEF

**Japan Internal Combustion
Engine Federation**