

Executive Director Report



Takashi Saito, New Executive Director JPMA

Dear Friends:

Thank you very much for your constant cooperation with JPMA activity.

Last year, many JPMA members participated in the PM2014 Florida, and enjoyed communications and intimate contacts with worldwide PM-related people gathered there, deepening friendship together. Also we would like to express sincere thanks to hosting members of MPIF/APMI for the heartfelt hospitality.

This year, the APMA 2015 will be held by Japan Powder Metallurgy Association and Japan Society of Powder Metallurgy at Kyoto University in Kyoto, Japan from November 8 through November 10. The first APMA conferences was held in Pusan, Korea, the second one was in Xiamen, China, and the APMA 2015 Kyoto will be the third APMA conference. The concept of the APMA 2015 is "Simple and Compact", and accordingly we are preparing effective lectures and paper presentations using facilities of Kyoto University. Many papers have already been applied, so an active and comprehensive conference would be expected.

Meanwhile, since the Autumn is the one of best season to sightseeing beautiful sceneries of Kyoto, a lot of worldwide sightseers visit Kyoto, so we hope many domestic and foreign PM related people to participate in the Conference and at same time to enjoy Autumn of Kyoto.

In comparison with an increase of 1.5% over last year of domestic product quantity of automobiles which are main PM products consumer, the increase for the same period of domestic product weight of PM machine parts and bearings was 0.4% that is presumed the result for driving cars reflected by their tendency of becoming compact and light weighted.

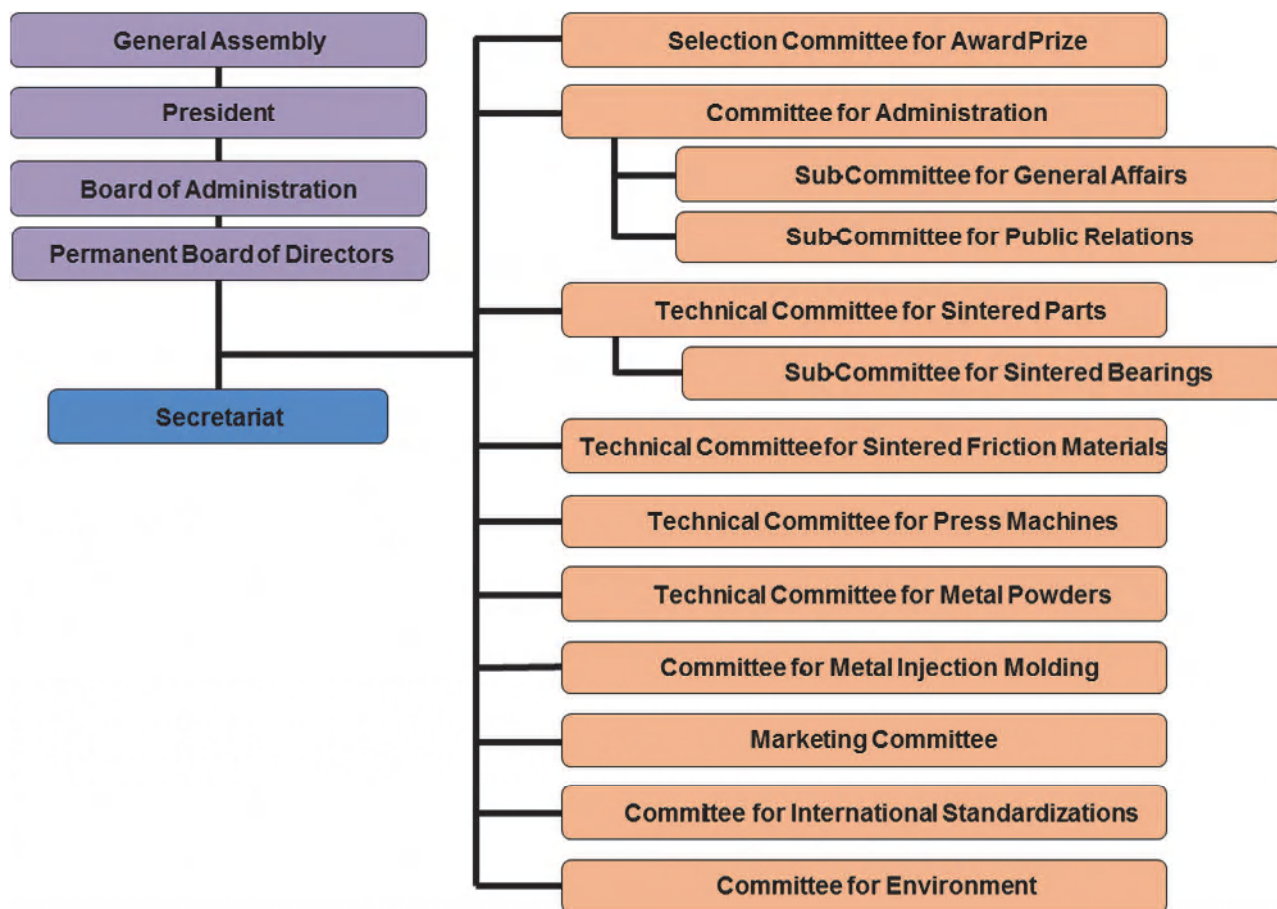
The Japanese economy is recovering thanks to the weak Yen staying, the stock price rising and the world economy improvement, though the recovering is gradual. However, the situation that it is difficult to expect the expansion of domestic automobile production as before is still unchanged.

Under such circumstances, the JPMA is actively working for standard integrations, standardizations, and promoting technologies with environmental issues. We believe such continuous activities will surely be favorable for the promotion of PM technologies and products and also the advancement of PM manufacturing fields.

Lastly, please note that the JPMA Web site has been renewed recently. So we would be happy if you could access to the Web address described below so that you could know JPMA' s activities, JPMA prize awarded products, etc. to be familiar with JPMA.

<http://www.jpma.gr.jp/en/>

Organization of JPMA



Board Members

President

Mr. Mamoru Moritani

Executive Officer General Manager, Powder Metal Products Division
SUMITOMO ELECTRIC INDUSTRIES, LTD.



Executive Director

Mr. Takashi Saito

Japan Powder Metallurgy Association

Permanent Board Members

□Mr. Taichi Haraquchi

DIAMET CORPORATION

□Mr. Yozo Sato

Hitachi Chemical Co., Ltd.

□Mr. Yoichi Inoue

FINE SINTER CO., LTD.

□Mr. Isamu Kikuchi

PORITE CORPORATION

□Mr. Akihiko Hamano

JFE Steel Corporation

□Mr. Syuzo Sonoda

FUKUDA METAL FOIL & POWDER CO., LTD.

Board Members

□Mr. Junichi Takahashi

IWAKI DIECAST Co., Ltd.

□Mr. Mikio Fujihara

Tungaloy Corporation

□Mr. Kazuhide Kikuchi

Tokai Carbon Co., Ltd.

□Mr. Masayoshi Nishimura

Fukuisinter Co., Ltd.

□Mr. Isao Takagi

KOBE STEEL, LTD.

□Mr. Kouhachiro Ohashi

Daido Steel Co., Ltd.

□Mr. Atsushi Nagano

Dowa Electronics Materials Co., Ltd.

□Mr. Masanori Kijima

Nippon Atomized Metal Powders Corporation

□Mr. Carl-Gustav Eklund

Höganäs Japan K.K.

□Mr. Kazuaki Kusakari

Mitsubishi Materials Techno Corporation

Auditor

□Mr. Masaaki Matsumoto

Tungaloy Corporation

□Mr. Tomomi Yamamoto

Daido Steel Co., Ltd.

JPMA Secretariat

□Mr. Yusuke Watanuki (Deputy Manager)

General Assembly, Committees, Events, Web, Publication

□Ms. Aoi Yamanaka (Staff)

Statistics, Events and General affairs

□Ms. Tokie Sakamoto (Staff)

Accountant and General affairs

Activities of Committees

Selection Committee for Award Prize

Number of Committee Members: 14 persons



Chairman: Mr. Yoichi Inoue
(FINE SINTER CO., LTD.)
New Chairman

*Selection Committee for JPMA Award (Development Prize)



New Design

Development of synchronizer hub with helical gear for DCT

SUMITOMO ELECTRIC INDUSTRIES, LTD.

Committee for Administration

Number of Committee Members: 22 persons

Sub-Committee for General Affairs

Number of Committee Members: 7 persons



Chairman: Mr. Sanpei Seki
(PORITE CORPORATION)
New Chairman

*Planning and operating of the PR meeting "JPMA Awards Special Session" at JSPM Spring Meeting in June

*Planning and operating of "the tour of Committee for Administration"

*Publication of the report "Analysis of investigation results of sintered parts demand structure 2013" in June

*Edition of the Brochure "2013 JPMA Annual Report (English)" and "2013 JPMA Annual Report (Japanese)" in July

* Planning and operating of "18th Metal Powder and Equipment PR Meeting" and "32th Case Studies on Improving Production Efficiency Meeting"

*Planning and operating of "PM information Exchange Meeting"

Sub-Committee for Public Relations

Number of Committee Members: 8 persons



Chairman: Mr. Yoshio Uetsuki
(SUMITOMO ELECTRIC INDUSTRIES, LTD.)
New Chairman

*Renewal of the "JPMA Website (Japanese site)"

*Planning of operating of "2nd Human resources development seminar"

*Publication of JPMA News "Funmatsu Yakin" (No377-380)

Technical Committee for Sintered Parts

Number of Committee Members: 9 persons



Chairman: Mr. Hiroaki Terai
(SUMITOMO ELECTRIC INDUSTRIES, LTD.)

New Chairman

*Discussion of the matter for ISO/TC119/SC3 and SC5

*Planning of the Domestic Standard(JIS) Draft “Sintered metal materials – Specification”

*Planning and operating of “Joint Meeting by three technical committees”

Sub-Committee for Sintered Bearings

Number of Committee Members: 4 persons



Chairman: Mr. Yoshinari Ishii
(DIAMET CORPORATION)

New Chairman

*Deliberation of standardization of the PV value

*Inter laboratory test of the PV value

Technical Committee for Sintered Friction Materials

Number of Committee Members: 3 persons



Chairman: Mr. Yoshihisa Ueda
(FINE SINTER CO., LTD.)

Commission from 2010

*Publication of the Excerpt of the Standard of Friction Material

*Exchange of Information for Friction Material

*Deliberation of “Opinion Exchange Meeting among Young Workers of Sintered Friction Materials Companies”

Technical Committee for Press Machines

Number of Committee Members: 7 persons



Chairman: Mr. Katsuo Murakami
(YOSHIZUKA SEIKI CO., LTD.)

Commission from 2010

*Exchange of Information for defect case of Press

*Exchange of Information for newfangled Press machine

*Planning and operating of “Joint Meeting by three technical committees”

Technical Committee for Metal Powders

Number of Committee Members: 16 persons



Chairman: Mr. Akio Sonobe
(JFE Steel Corporation)
Commission from 2010

*Discussion of Matter for ISO/TC119/SC2

ISO4498 Join to the inter laboratory test

*Introduction of topics about "Metal Powder" by Committee members and exchange of views

*Planning and operating of "Joint Meeting by three technical committees"

Committee for Metal Injection Molding

Number of Committee Members: 11 persons



Chairman: Mr. Junichi Takahashi
(IWAKI DIECAST CO., LTD.)
New Chairman

*Investigation of the Japanese MIM market

*Operating on the Standardization of the *Materials Property (fatigue, impact and tensile) with Sub-Committee for Material Characteristics

*Planning of "the MIM booklet"

Marketing Committee

Number of Committee Members: 14 persons



Chairman: Mr. Tatsuya Kajino
(PORITE CORPORATION)
New Chairman

*Introduction of topics by Committee Members and exchange of views

*Introduction of Information Gathering of User Market and Other Market

Committee for International Standardizations

Number of Committee Members: 7 persons



Chairman: Mr. Tetsuya Sawayama
(KOBE STEEL, LTD.)
Commission from 2012

*Discussion of related matters for TC119, SC2, SC3 and SC5

Committee for Environment

Number of Committee Members: 5 persons



Chairman: Mr. Motonobu Isaka
(DIAMET CORPORATION)
New Chairman

*Investigation of 2013 follow-up survey for “Voluntary Action Plan for Environment of PM Industry”

*Introduction of Case Study of “CO2 Emissions Reduction”, “Waste Product Reduction” and “KANKYO HIYARI”

JPMA Events and International Communications

15. January

Gathering of 2014 New Year Greeting and Ceremony of Awarding Various Honors in 2013

28. February-1.March

The 5th Opinion Exchange Meeting among Young Workers of MIM Companies

20. March

The 9th PM Information Exchange Meeting

9. May

2014 JPMA General Assembly

Mr. Mamoru Moritani was elected as a new President.

The 2014 Working Plans and Budget of JPMA

18-23. May

PM2014 World Congress in Orland

21. May

APMA, 6th Board Meeting

21. May

MPIF/EPMA/JPMA Meeting

3. June

JPMA Special Session at the JPMA Spring Meeting

19. June

Tour of Committee for Administration

Kyushu University Ito Campus

4. July

2nd Human resources development seminar

23. October

2014 JPMA Fall General Assembly

Announcement of 2013 JPMA Awards

14. November

The 32th Case Studies of Production Efficiency

Improvement Meeting and the 18th Metal Powder and

Equipment PR Meeting

JPMA Publications

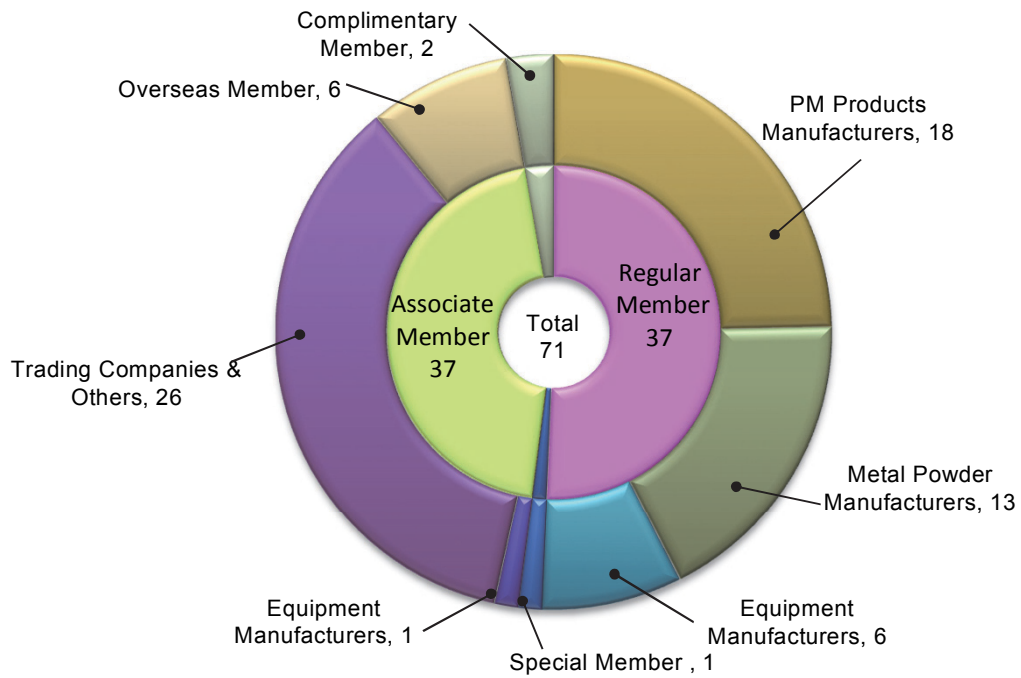
The 35th Investigation Collection Results of Sintered Parts Demand Structure

JPMA Report, 2013 (English and Japanese)

JPMA News “Funmatsu Yakin” (No377-380)

The Excerpt of the Standard of Friction Material

JPMA Membership



2014 New Members

Associate Member

Prime Corporation

- No Company Logo -

Hitachi Automotive Systems, Ltd.



SANDVIK OSPREY LTD



KTC KYOTO TOOL CO., LTD.



PMG Group



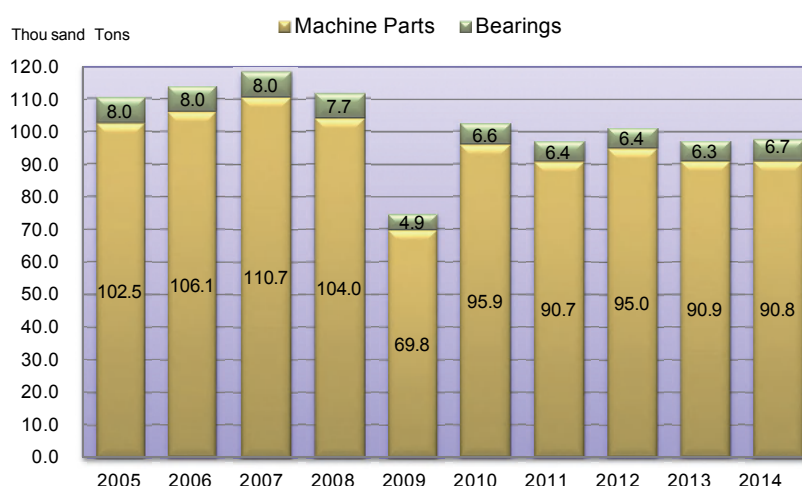
Statistics of Japan

Production of PM Products in Japan

Fig1 shows the production volume change of Machine Parts and Bearings for the period from 2005 through 2014.

Machine Parts volume was 90,838 ton, 0.1% decrease from the previous year. Bearings volume was 6,740 ton, 7.2% increase from the previous year. As the other products, Friction Materials volume was 691 ton, 14.4% increase from the previous year. Electric Contacts volume was 64 ton, 8.5% increase from the previous year.

Fig1. Production of Machine Parts and Bearings (Calendar Year) (Source: METI)



Machine Parts and Bearings

Fig2 shows the analysis of demand for Machine parts and Bearings for the period from 2005 through 2014

Machine Parts Production volume for Vehicles was 84,224 ton, 0.4% decrease from the previous year.

This is because the production volume of vehicles, that automobile industry is the main user of P/M, was increased because of the onetime demand increase between Jan. through Mar. before the sales tax increase in April, 2014, but after that, the production amount was decreased by the reaction.

It is expected that the production volume of vehicles in 2015 will be decreased compared with 2014, that means the production amount of Machine Parts will be decreased. Bearings has some factor for production increase because the production plants and sales places will be transferred back from foreign countries to Japan.

And also Automobile makers will invest the new model, and plan the sales increase by adding the preventive safety technology. By those efforts, it is expected that the demand increase in future.

Production volume of Bearings for Vehicles was 4,197 ton, 6.5% increase from the previous year.

Fig2. Analysis of Demand for Machine Parts and Bearings (Calendar Year) (Source: METI)

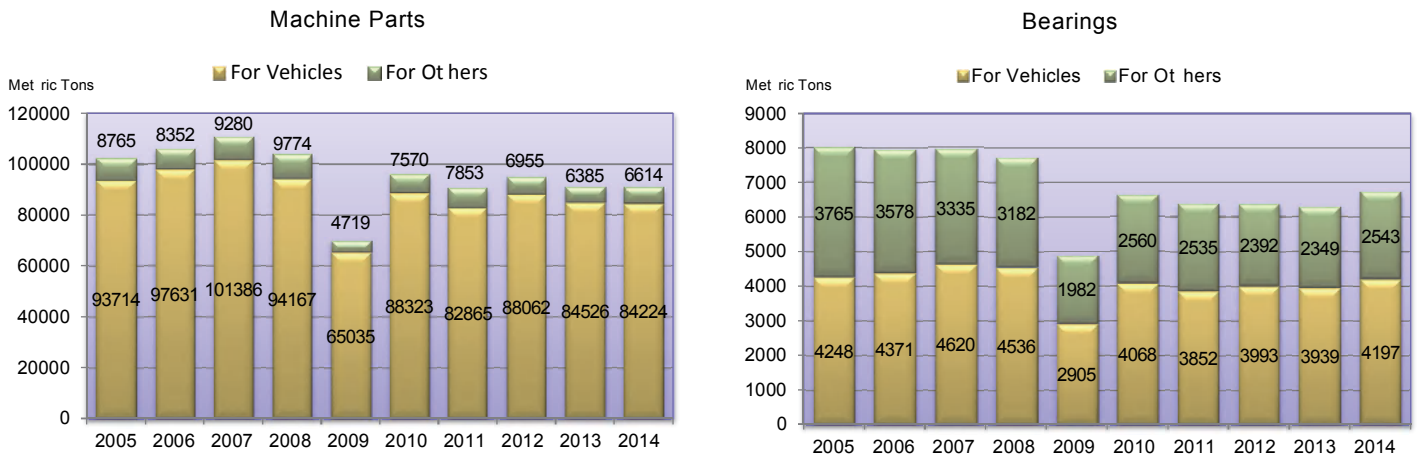


Fig3 shows the use breakdown of Machine parts and Bearings in vehicle in 2013 based on the demand structure survey by JPMA.

52.8% of Machine parts were for engine use, the main trends of Machine parts are the cost down by the weight decrease of the existing parts or the cost down by design change from assembly of a few parts to one body. And P/M technology is used to make the new T/M Gear, and it is expected the future production increase.

The main demand of Bearings is for electrical use. For Bearings, the main trends are to produce Bearings with the strength, anti-corrosion property, high temperature use, anti-load property and anti-vibration property and also the bearings without rare metals. The use of Bearings with high quality and low cost are expected to expand continuously in future.

Fig3. Breakdown of Machine Parts and Bearings for Automobile (2013) (Source: JPMA)

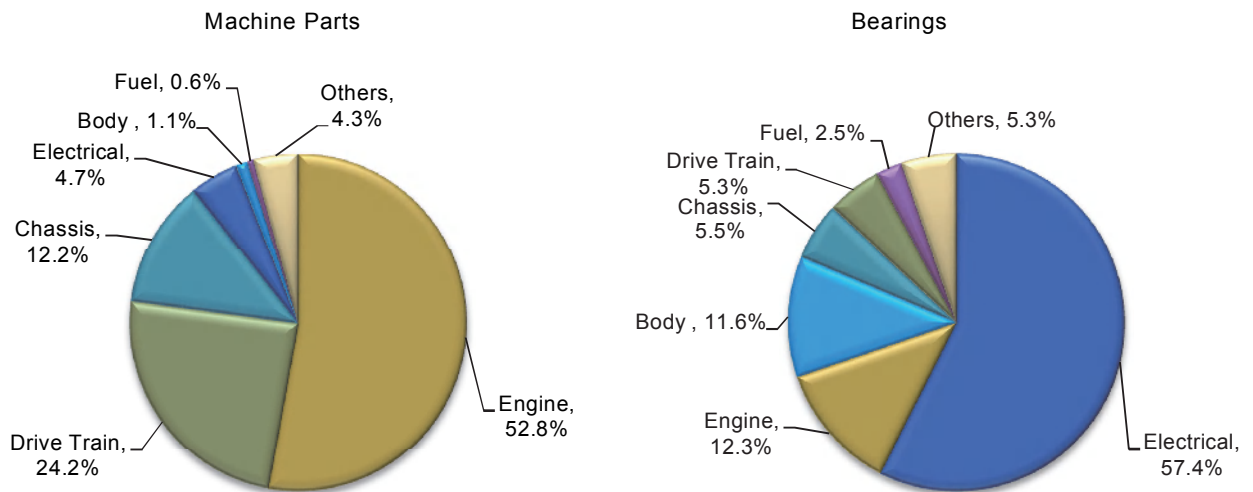


Fig4 shows the weight of sintered parts used for one car and the car production in Japan for the period from 2004 through 2013.

The weight of sintered parts used for one car in 2013 was 8.8kg in Japan, 20.2kg in U.S. and 9.0kg in Europe.

Fig4. Weight for sintered parts used for one car (Source JPMA and JAMA)

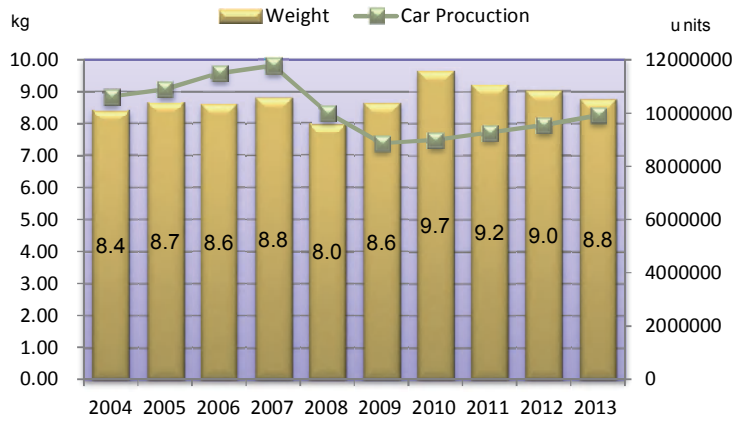
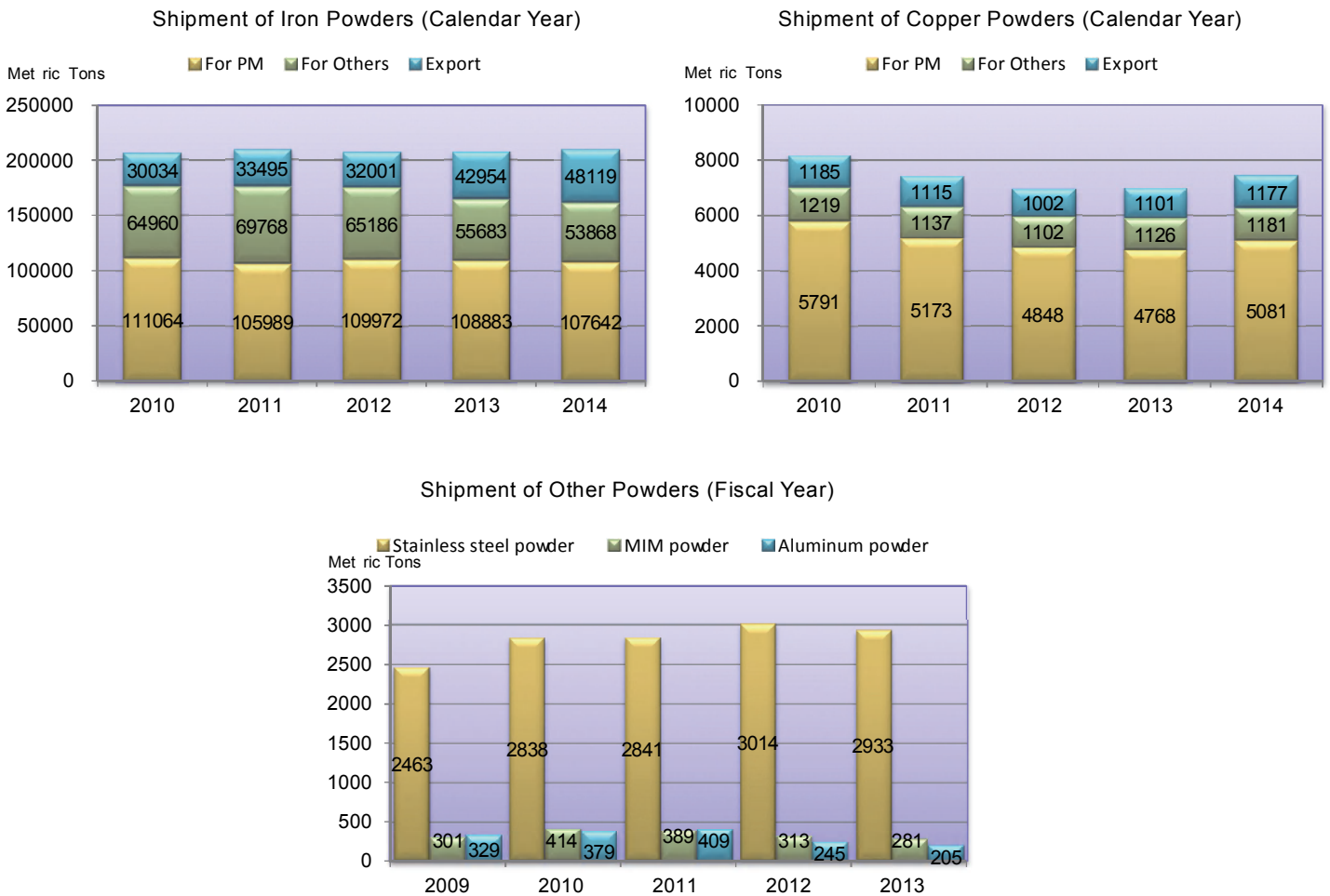


Fig5 shows Shipment of Metal Powders.

Fig.5 Shipment of Metal Powders (Source JPMA)



Awards

Personal Prize

Mr. Yoshiyasu Iino

Adviser of DIAMET CORPORATION

2010-2014

Chairman of JPMA

Board Member of JPMA

Chairman of Selection Committee for Award Prize

Chairman of PM2012 Organizing Committee



Mr. Kazunori Arai

Former Executive Director of JPMA

2008-2014

Executive Director of JPMA

Secretary General of PM2012

Secretariat of APMA



Development Prize

A New Design

A-1

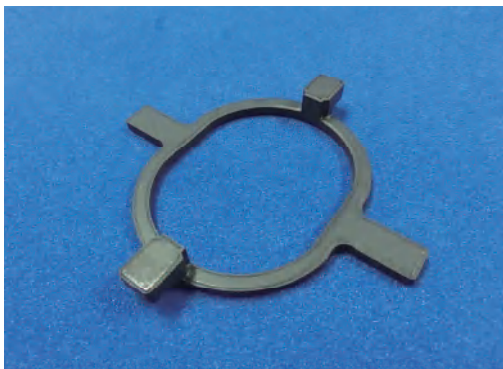
Development of synchronizer hub with helical gear for DCT



SUMITOMO ELECTRIC INDUSTRIES, LTD.

A-2

Air-compressor component with thin-walled part for electric vehicle



DIAMET CORPORATION

A-3

Development of sprocket with crank sensor for diesel engine



DIAMET CORPORATION

B New Materials

B-1

Development of sintered bearing for the output shaft in door closer motor



DIAMET CORPORATION

B-2

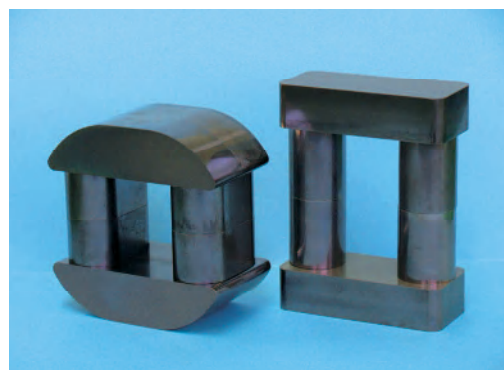
Valve guide material with high wear resistance by dispersion of hard particle



Hitachi Chemical Co., Ltd.

B-3

Net Shape Reactor Core with Developed Insulating-Lubricant



Hitachi Chemical Co., Ltd.

C Process Development

C-1

Development of DCT synchronizer hub applied laser quenching technology

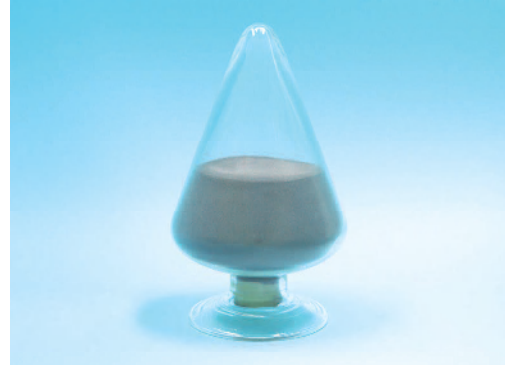


SUMITOMO ELECTRIC INDUSTRIES, LTD.

D New Powder

D-1

Ni Free Alloyed Steel Powder Providing the 600MPa in Tensile Strength and the Excellent Machinability of Sintered Parts



JFE Steel Corporation

E Equipment Development

E-1

Compactly integrated production line exclusively for shock absorber parts



FINE SINTER CO., LTD.

F Effort Prize

F-1

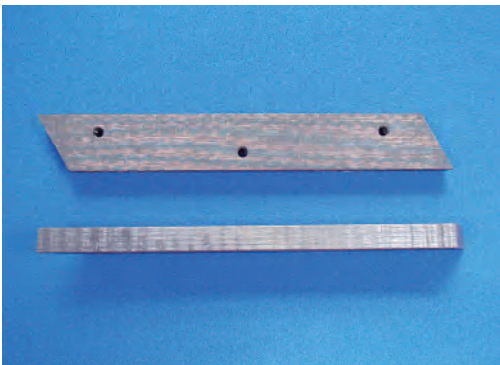
Valve switching motor sintered oilless bearing for high-temperature



PORITE CORPORATION

F-2

Sintered contact strip material made of C/C composite impregnated with copper alloy used for train vehicle



FINE SINTER CO., LTD.

F-3

Miniature Tool Set



CASTEM CO., LTD.

Prize for Distinguish Service of the Committee Activities

Mr. Hiroshi Shimizu

PORITE CORPORATION

1999-2001

Member of Committee for Administration

Member of Sub-Committee for General Affairs

Member of Sub-Committee for Public Relations

Member of Marketing Committee

Member of PM2000 Steering Committee

2006-2014

Member of Committee for Environment



Mr. Isamu Otsuka

EPSON ATMIX CORPORATION

2006-2014

Chairman and Member of Metal Injection Molding



Mr. Atsushi Tamaki

SUMITOMO ELECTRIC INDUSTRIES, LTD.

2010-2014

Chairman and Member of Committee for Administration

Chairman and Member of Sub-Committee for General Affairs

Chairman and Member of Sub-Committee for Public Relations

Member of Selection Committee for Award Prize

Member of PM2012 Steering Committee



Recognition of Superior Employees

2014 prizewinner numbered 17 persons
(12 member companies)



2014 APMA Activities

The 6th Board Meeting

Date: Wednesday 21th May 2014 10:00 - 12:00

Venue : The Walt Disney World Dolphin Hotel, Oceanic 1 Room, Lobby Floor

Participants :

APMA Board Member

President	Mr. Isamu Kikuchi (JPMA, Japan)
Director	Prof. Young Do Kim (KPMI, Korea)
Director	Mr. Chiu-Lung Chu (TPMA, Taiwan)
Director	Mr. N. Gopinath (PMAI, India)
Director	Dr. Han Wei (CPMA, China)
Auditor	Prof. Hideshi Miura (JSPM, Japan)
Secretariat	Mr. Takashi Saito (JPMA, Japan)



Attendant of APMA Members Association

CPMA(China)	Dr. Cai Rang	President
	Dr. Han Wei	Secretary General
	Dr. Yu Yang	Director
CPMS(China)	Prof. Xiong Xiang	Secretariat
TPMA(Taiwan)	Mr. Chiu-Lung Chu	President
KPMA(Korea)	-----	
KPMI(Korea)	Prof. Young Do Kim	President
	Mr. Hwi Jun Kim	
PMAI(India)	Mr. N.Gopinath	President
JSPM(Japan)	Prof. Hideshi Miura	President
	Ms. Yoko Inoue	Secretary General
JPMA(Japan)	Mr. Mamoru Moritani	President
	Mr. Isamu Kikuchi	Permanent Board of Director
	Mr. Sanpei Seki	Chairman of Committee Administration
	Mr. Atsushi Tamaki	Member of Committee Administration
	Mr. Takashi Saito	Executive Director
	Mr. Yusuke Watanuki	Secretariat

Conclusion

*2014 Finance was approved

*Board members was elected

Mr. Isamu Kikuchi was elected as a President

Mr. Jun Sakai of JSPM president was elected as an Auditor

*Introduction of the APMA2015 Kyoto, Japan preparations situation

*Clarification for the PM2018 China host city and the Visa problem

*Next APMA Conference is decided to be held in Taiwan

*Next APMA Board Meeting is decided to be held at APMA2015 Kyoto, Japan

PM Production in Asia

PM Production (Source JPMA, PMAI, KPMI, TPMA and CMPMA)

(Metric Tons)

AREA		2012	2013	2014	14/13(%)
Japan	Iron-base	96,979	93,251	93,594	100.4
	Copper-base	4,427	3,948	3,984	100.9
	Total	101,406	97,199	97,578	100.4
China	Iron-base	129,485	145,291	166,865	114.8
	Copper-base	10,011	11,293	12,173	107.8
	Total	139,496	156,584	179,038	114.3
Korea	*Iron-base	64,026	65,292	67,881	104.0
	Copper-base	1,209	585	632	108.0
	Total	65,235	65,877	68,513	104.0
Taiwan	Iron-base	26,000	29,000	30,000	103.4
	Copper-base	1,200	1,500	2,000	133.3
	Total	27,200	30,500	32,000	104.9
India	Iron-base	37,000	36,000	37,000	102.8
	Copper-base	14,500	12,100	12,100	100.0
	Total	51,500	48,100	49,100	102.1
Malaysia	Iron-base	5,335	5,419	4,963	91.6
	Copper-base	244	239	213	89.1
	Total	5,579	5,658	5,176	91.5
Singapore	Iron-base	1,413	1,443	1,420	98.4
	Copper-base	654	626	600	95.8
	Total	2,067	2,069	2,020	97.6
Thailand	Iron-base	16,029	15,156	14,748	97.3
	Copper-base	6	7	7	100.0
	Total	16,035	15,163	14,755	97.3
Indonesia	Iron-base	—	1,619	2,959	182.3
	Copper-base	—	0	45	—
	Total	—	1,619	3,004	185.5
Total	Iron-base	376,267	392,471	419,430	106.9
	Copper-base	32,251	30,298	31,754	104.8
	Total	408,518	422,769	451,184	106.7

*Included "Others"

Application Field Ratio of PM Production (2014) (%)

AREA	For Transportation Machines	For Industrial Machines	For Electrical Machines	For Others
Japan	92	4	3	1
China	62	2	27	9
Korea	94	0	3	3
Taiwan	40	25	13	22
India	77	6	13	22
Malaysia	59	2	39	0
Singapore	52	6	42	0
Thailand	91	1	8	0
Indonesia	100	0	0	0