



JARA NEWS

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JARA Group holds its first joint working level seminar

Seventy-seven attendees join open and honest talk

JARA Group held its “National Working Level Joint Seminar” at the Cosmosquare Hotel and Congress in Osaka on July 23rd- and 24th. It was the first time for the group to host such an event. The two-day seminar was attended by 77 persons.

Until now, JARA Group took part in such seminars on a regional block- basis (i.e., Hokkaido and Tohoku, Kanto, Chubu and Kansai, and Chugoku-Shikoku-Kyushu). However, opportunities to join in open and honest exchanges have been declining because of generation changes in member companies’ management. The need for a nationwide platform for such talks, therefore, was looming.

At the beginning of the seminar, JARA Group Vice Chairman Junichiro Kawashima delivered the message: “This is the first national working-level seminar for JARA Group. Please try to take something you will learn from here back to your company and share the information.”

In the meeting focusing on the necessity of scan tools, samples to show how to use such tools in the workplace were introduced. The necessity to respond correctively to highly electrified automobiles was also highlighted. A video showing an active test for verification of a meter panel was unveiled. Quality Management Department Manager Hiroki Watanabe said, “The use of scan tools allows us to improve the quality of recycled auto parts and lower the claim rate.”

JARA Group recognizes that the sales of member companies using scan tools are increasing remarkably. Therefore, group members will be encouraged to use more scan tools to expand their businesses. Quality standards for recycled parts inside the group will also be targeted (*Daily Automotive News, June 29*).

JARA Group holds its first winch operation training

JARA Group held its first “Special Training for Low Voltage Handling and Winch Operation” in mid-June at the Mie Parts Co.’s site. Mr. Naoki Ogawa of the Proto-Rios Inc. Body Repair Technical Center served as the instructor. Thirty-six people from 13 companies participated in the training.

On the first day, trainees received a lesson in low voltage handling. They participated in detaching service plugs from a hybrid car. On the second day, they operated the winch to load a vehicle onto the car carrier truck by checking the cautionary points.

This year, JARA Group is carrying out a series of training courses related to the Industrial Safety and Health Law. To qualify for winch operations,

operators should complete the special training course under the abovementioned law and related regulations.

JARA Group will advise members to attend applicable courses relation to vehicle acceptance under the Automobile Recycling Law, thereby helping members with compliance matters. The group plans to host such a training course in each regional block (*Daily Automotive News, July 7*).



Automotive Engineering Exposition 2017 Nagoya opens

On July 29th, the Society of Automotive Engineers of Japan, Inc. hosted a forum entitled “Recommendation for Transportation Systems and Vehicle Powertrain Designed for the Social Conditions for 2050,” during the Automotive Engineering Exposition 2017 Nagoya. Panelists pointed out the big changes to come, as summarized below.

Challenge to reduce CO2 emissions

Masanori Sugiyama, the director of Higashi Fuji Research Institute, Toyota Motor Corporation, stated, “Unfortunately, the United States expressed an exit from the COP21 Paris agreement (which suggests a possible rise in the global temperature within two degrees centigrade), but this global trend remains unchanged.” He maintained that the attitude toward acceleration of reduction of CO2 emissions should also remain unchanged, and he pointed out technical issues related to the reduction of CO2 emissions from “well-to-wheels” analyses. These include generation by renewable energy, hydrogen production and storage, diffusion of plug-in hybrid vehicles (PHVs), electric vehicles (EVs), and fuel cell vehicles (FCVs); additional issues are an improvement in the efficiency of internal combustion engine vehicles and hybrid vehicles, and the collection and reuse of CO2. Sugiyama appealed, “Toyota can’t do that alone. The government, academic sectors, and all industries should join forces.”

“Ecosystem” of the car to change

Journalist Yumi Kawabata pointed to the ecosystem of the next generation mobility in which conventional (e.g., carmakers, suppliers, energy firms) and new (e.g., cloud, AI, software vendors,

servicers, telecommunications) streams are mixed. By focusing on the International Energy Agency’s forecasts for declining oil production beginning around 2019, Kawabata assumes that Japan is entering an era of low energy and low growth. The journalist insisted that Japan should go for the “new structure of a country” that combines technologies of efficiency with lifestyles aimed at saving money.

Japan: Without a concept

The panel discussions partly progressed under the themes of “Global Warming and Energy Security,” “Smart City,” and “Sudden Steering toward EVs.”

Waseda University Professor Yasuhiro Daisho said, “Although model smart cities are popping up in Japan and China, they might not expand. As for a sudden steering toward EVs in Europe, there might be impatience in the wake of Volkswagen’s emissions scandal and Germany’s lagging in battery development.” Yoshio Maeda, Honda R&D Co., Ltd. stressed, “Europe moves with a big concept. In Japan, the administrations are vertically segmented and every company competes with each other. Things must be done comprehensively.”

Hisaki Torisaka, Hino Motors, Ltd. observed, “Although independent technology is enough, the whole system is weak. To resolve this issue, we could conduct verification tests in each large, middle-sized, and small city” (*Daily Automotive News, July 3*).



METI approves JIS in three months at the earliest

Revised rule to cover automobiles

The Ministry of Economy, Trade and Industry (METI) recently prepared a bill for the revision of the Industrial Standardization Act (JIS Act). Under the revised act, the issuance of certification, which requires about a year under the current act, will be shortened to three months at the earliest. Coverage will expand to include the sharing economy, manufacturing methods, and a management of code of conduct. METI will submit the bill in the next ordinary session of the Diet next year.

The International Organization for Standardization already includes services and management in its scope: a widened scope under the revised JIS Act is a response to this move. In addition to the sharing economy, the act also makes provisions for an automated (autonomous) driving system, nursing care and upbringing, bridal businesses, mail service, weather information and disaster prevention, tourism, and small refrigerated cargo delivery services.

The revised act will allow nongovernment organizations such as the Japanese Standards Association to deliberate in matters related to the JIS Act. Speedier deliberations in the service

area, which will have numerous applications, can be expected. METI will also tighten relationships with international organizations, by encouraging the introduction of internationally compatible regulations and providing technical assistance. It will be involved actively in standardization in overseas countries. (Daily Automotive News, July 22 issue)

Transport ministry to include "fuel economy" in safety standards

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) began discussions on the addition of fuel economy to its safety standards under the Road Transport Vehicle Act. The move is the transport ministry's effort to speedily address falsification of fuel economy tests by carmakers. Under the revised Road Transport Vehicle Act, enacted in May, the transport minister will be able to cancel the type designation of a vehicle if it is found that the designation or its equipment was obtained by falsified means. Carmakers will be required to meet the new safety regulations pertaining to fuel economy. The ministry is planning to complete the discussion and revise its ministerial order by the end of this year at the latest. This development should not affect the mandatory vehicle inspection (Shaken) system.



Measuring fuel economy and exhaust emissions from a vehicle

Under the new rule, the fine for a falsified report will be raised 300,000–200,000,000 yen. Safety standards for the vehicle body, engine, and brakes, for example, have already been established under the law, and carmakers and users must meet the requirements. Adding fuel economy to the scope would clarify the need for compliance. The MLIT has failed to apply disposition in fuel economy falsifying cases under taken by Mitsubishi Motors Corporation and Suzuki Motor Corporation, because there was no clear rule in this area under the Road Transport Vehicle Act.

In the future, any falsification or mistakes regarding fuel economy should be considered as nonconformity to the safety standards, and will result in the cancellation of type designation or a recall. (Daily Automotive News, July 14 issue)

Toyota to halve hydrogen supply chain costs, conduct verification using fuel cell forklifts

Shigeki Tomoyama, Executive Officer of Toyota Motor Corporation, unveiled plans to halve hydrogen supply costs (generation, compression, and delivery) in the future.

Various regulations and expenses associated with facilities for hydrogen generation, as well

as a limited demand for hydrogen, have driven operation costs to their currently high level.

At present, hydrogen is provided by Iwatani Corporation and other companies at a price of 100 yen per cubic meter, which is on par with prices for gasoline incurred by the Toyota Crown Hybrid users. Hydrogen sales are in the red; by halving the cost, the business is expected to run on a for-profit basis.

Project begins to supply wind power-generated hydrogen to fuel cell forklifts

Toyota Motor Corporation, the Kanagawa Prefectural Government, and Toyota Industries Corporation, announced on July 12 that full-scale operations to supply wind power-generated hydrogen to fuel cell-powered forklifts (FC forklifts) would begin on July 13. The goal of the project is to implement and evaluate a low-carbon hydrogen supply chain that will utilize hydrogen produced from renewable energy in facilities along Tokyo Bay (in Yokohama and Kawasaki) to power forklifts.

A system has been created for using electricity generated at the Yokohama City Wind Power Plant (Hama Wing) to electrolyze water and create low-carbon hydrogen, which will subsequently be compressed and stored. Hydrogen produced at the site will be transported in a hydrogen fueling truck to a fruit and vegetable market, factory, and warehouses. The hydrogen will be used in fuel cells to power forklifts at these locations.

The creation of this hydrogen supply chain is expected to reduce CO2 emissions by at least

80 percent when compared with the supply chain using forklifts powered by gasoline or grid electricity. Tomoyama said at a press conference, "We will be involved in this project in terms of cost eyeing a potential business."

Toyota Industries Corporation will introduce 12 FC forklifts at four sites.

Other partners of this project include the municipal governments of Yokohama and Kawasaki, Iwatani Corporation, Toshiba Corporation, Toyota Turbine and Systems, Inc., and Japan Environment Systems Co., Ltd.

This project, employed as the fiscal 2015 Regional Cooperation and Low-carbon Hydrogen Technology Demonstration Project commissioned by the Ministry of the Environment, will last until FY2018 (Daily Automotive News, July 13).



A tape-cutting ceremony for the hydrogen facility in a wind power plant in Yokohama

CO2 Reduction Effect (based on JARA System)

The use of Reuse Parts saved
2,505 tons of CO2 emissions
in June 2017

The reference figure represents the difference of carbon dioxide (CO2) emissions at the vehicle repair using genuine (new) parts and recycled parts.*

*: Based on "Green Point System", which was jointly developed by the Japan Automotive Parts Recyclers Association and Waseda University Environmental Research Institute using a life cycle assessment (LCA) technique.



Dismantling process flow chart

How the Car Dismantling machine works



The Evolution of car dismantling industry by Kobelco

Four times* the vehicle dismantling capability compared with hand dismantling.

*In one day (Kobelco test figures)

15 vehicles >
One operative working by hand.

60 vehicles >
One operative in a Kobelco Car Dismantling machine.

Engine, Catalytic Agents, Body Steel, Seats, Windows, Wheels/Tyres, Suspension, Radiator, Brakes, Front & Rear Bumpers, Transmission, Doors, Harnesses

The machine's special attachment is designed to strip materials from End-of-Life Vehicles (ELV) safely and thoroughly

Improved recovery rate of rare earth metals

Fe Iron	Al Aluminum	Cu Copper	Pt Platinum	Pd Palladium
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Separation of these valuable materials is quicker and easier and can be performed with one Kobelco machine.



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