



JARA NEWS

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JARA President Kitajima delivers a lecture in India

The President of “Japan Automobile Recyclers Alliance” (JARA) Corporation, Sosho Kitajima, pictured above, delivered a lecture at a conference held in India, which was hosted by “Metal Recycling Association of India” (MRAI). The event was attended by the board of directors of MRAI and “Society of the Indian Automobile Manufacturers” (SIAM), as well as delegates from European and Asian automotive industries. Under the theme “Sustainable Growth,” attendees discussed India’s sustainable growth along with its economic development and environmental issues.

In addition to an introduction on JARA’s

CO₂ Reduction Effect (based on JARA System)

The use of Reuse Parts saved
3,447 tons of CO₂ emissions
in October 2018

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.



activities through a video, Kitajima explained about the Japanese distribution networks of recycled auto parts. He also participated in a tree-planting ceremony as an aid for the conservation of the environment and natural resources.

The annual sales figures on the new vehicle market in India are expected to grow from 4 million-unit at present to 10 million units in 2030. Along with the increase in sale figures, people pay considerable attention to the recycling of end-of-life-vehicles (ELVs) in India. SIAM and MRAI are likely to come close to the proper process of recycling ELVs, which reflects the advanced auto recycling system in Japan (*Daily Automotive News*, Nov. 15 issue).

Eleventh AAEF organized in India for the first time

The Eleventh Asian Automotive Environmental Forum (AAEF) was organized in New Delhi on November 1, 2018 (Pictured above). The AAEF was organized in India for the first time and approximately 200 delegates from seven countries participated in the main conference and its related meetings. These delegates included automakers, representatives from the automotive recycling industry, and those from government and academic sectors.

From Japan, directors and members of the AAEF Japan Committee (Chairman YU Jeong-soo, Tohoku University graduate school professor) and the non-profit organization Japan Automotive Recycling Alliance (Chairman Satoshi Takahashi) participated in the event (*Daily Automotive News*, Nov. 2 issue).

JARA holds BP cost estimate technique workshop

JARA Corporation held its Body Repair and Paint (BP) Cost Estimate Technique Workshop at the Aioi Nissay Dowa Automobile Research Institute (Higashifuji Center) located in Susono city, Shizuoka Prefecture. The three-day workshop was attended by eight delegates from four JARA member companies. The workshop aimed to educate the attendees about estimation work techniques for approximately 200,000 yen damage repair work of body skin panel or exterior parts.

This was the second workshop held by JARA and they considered that “it is important for recyclers to understand how BP and other repair shops make cost estimate.” JARA also said that “this initiative allows recyclers to usually propose optimal recycled parts to customers.”

The content of this year’s workshop included estimate-making considering the type of coat and paint, as well as paint booth conditions, and estimate value calculation based on the determined difficulty levels considering of the portion, structure, and extent of damage. Two trainees formed a team to measure the size of damage on an actual vehicle, and then determined the difficulty level for repair.

By preparing repair cost estimates, recyclers can provide strategic pricing for recycled parts considering repair and paint costs. In addition, this allows recyclers to quickly prepare cost estimates for repair when they need to offer an estimate for ELVs and other vehicles before transporting to their recycling facilities (*Daily Automotive News*, Nov. 8 issue).



--- Welcome to JARA Partner Rebuilt Parts Manufacturer ---



Variable nozzle to be rebuilt in the enhanced VG motor room



Disassembled variable nozzle. Each component is identified.



Cleanliness is always maintained inside the plant

Turbo Techno Service expands supply of rebuilt VGS turbo

Tokyo-based rebuilt parts manufacturer, Turbo Techno Service Co., Ltd. (President Mizuho Ichikawa), a Turbo Techno Service (TTS) Group company, is increasing its supply capacity for rebuilt parts of turbochargers with variable geometry systems (VGS). Its "VG Motor Room," in which rebuild work for VGS is operated, has expanded the floor space by five times compared to the previous location in Okegawa City, Saitama Prefecture. Its group company, Turbo Techno Engineering Co., Ltd. (President Kazumi Nishi), operates the facility. Together with the space expansion, operational efficiency of rebuilding VGS turbo has significantly improved. Demand for VGS turbo is increasing, especially for truck and bus use. The company is accelerating its effort to build a group-wide system that meets the growing demand.

Trouble occurs depending on mileage and vehicle age Turbocharger with VGS, or VGS turbo, was recently introduced to help increase torque at a low

velocity for vehicles equipped with a conventional turbocharger. At low velocity, VGS turbo squeezes the nozzle, thereby increasing exhaust flow rate, which speeds up rotation of the rotor. This increases the power of the engine. The VGS turbo was mostly used in diesel engines, because it provides ample torque for even a downsize engine.

The VGS turbo, however, has a weak point. The variable nozzle of VGS turbo wears because it runs with no lubricant at a high temperature. When the engine suffers metal wear, metal pieces in the exhaust gas may enter the variable nozzle, which causes trouble. Such troubles are often found in smaller trucks and buses, which mostly run on city streets where frequent stops and starts are required. In addition, heavy- to medium-duty trucks over ten years old or with mileage over 500,000 kilometers have the same issues.

At present, Techno Turbo Service receives many inquiries regarding rebuilt turbochargers. President Ichikawa said, "So far our business has mostly focused on mini-vehicles. But now 70-80 percent of our products go to trucks and buses."

Optimal layout of equipment in VG Motor Room

In the VG Motor Room, used turbochargers, called "cores", arrive after being washed. The variable nozzle is disassembled and each part of the component is inspected to determine whether it is worn or deformed. If a component does not meet the standard size requirement, it is replaced with a new one, and then all the components are welded and assembled. After the pre-shipment inspection, the rebuilt nozzle goes to the next process. These processes are effectively linked with others to realize the optimal layout of equipment

and welding machines for efficient work. "Without adding personnel, we saw a significant advance in working efficiency," said Ichikawa.

TTS Techno Center inside the plant

TTS Group has a TTS Techno Center in the area of Turbo Techno Engineering. The center accommodates visitors and partner companies to let them deepen their understanding of turbochargers. In the training room, people can learn about the structure, function, and trouble-shooting in turbochargers by viewing videos and cut models of turbochargers. In the TTS Group, the center is an important platform where people can gain accurate knowledge on how to prevent complications with turbochargers.

Although a tidal wave of electrified technology is approaching to the automotive industry, demand for diesel engines with turbochargers is expected to continue on trucks and buses, which often travel long distances. TTS Group aims to strengthen supply systems to further improve customer satisfaction. (*Daily Automotive News, Nov. 1 issue*).

Training room in the TTS Techno Center



Kazuhiro Watanabe delivered a message of thanks to attendees.

Carec celebrates its 45th anniversary

Fukushima Prefecture-based recycler Carec Co., Ltd. held its 45th anniversary celebration in Iwaki city. A total of 150 people attended the memorial event, including Japan Automotive Recyclers Alliance Group member companies and Carec partner companies.

At the beginning of the event, the company president, Kazuhiro Watanabe, delivered a message of gratitude to the attendees, "I would like to express my deepest thanks to people who have been supporting our company for 45 years." "My father, a relative, and I formed this company and then met members of a nationwide parts distribution group (former JARA Group), which consists of 200 companies. We were really inspired by them and decided to make greater efforts towards the growth. In other words, Carec has developed with your support. Going forward, together with company staff, I will continue to make Carec an even more reliable company." Vice president Hiroki Watanabe said, "I appreciate so many people coming from around the country to attend our event. Please enjoy this celebration!"

Guest speaker Satoshi Takahashi, president of Takahashi Shoukai Co., Ltd. made a congratulatory speech. "When president Mr. Watanabe was in his 30s, he visited my company. At that time, I was impressed by him. He studied very hard. Later, his company grew. Today, the management of many of recycling companies are transferring from father to son. Our industry is in a once-in-a-century

transformational period. We all want to overcome this challenge together." Shosho Kitajima, JARA Corporation President said, "Now vice president Hiroki Watanabe is actively involved in JARA's Executive Office Department. Working together with Carec, we always learn something new. Let's go forward towards growth!"

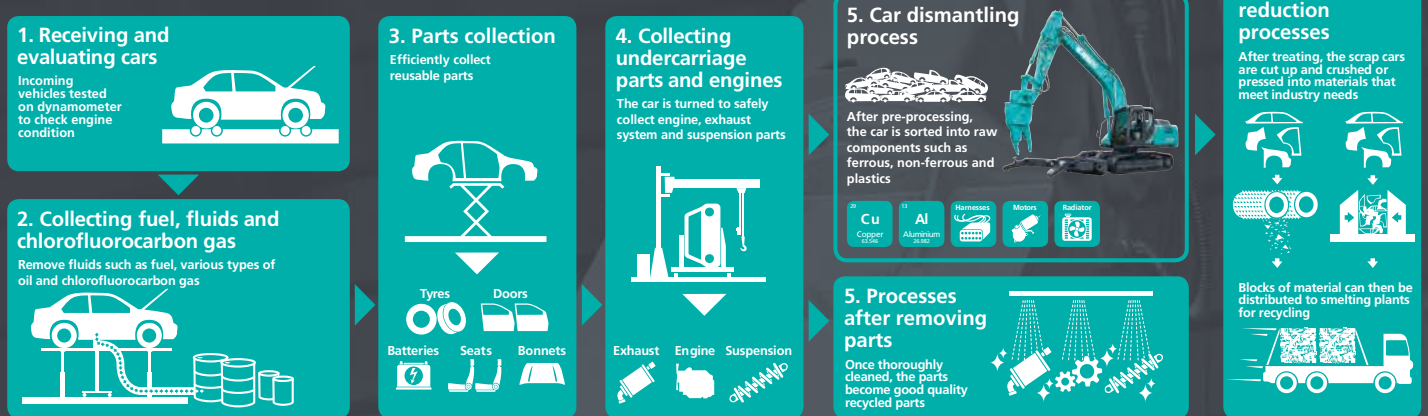
Prior to the reception party, attendees lent their ear to the memorial lecture, which was given by Tetsuya Toyota from Prudential Life Insurance Co., Ltd.

Carec Co., Ltd. was established in 1937 as Watanabe Shoukai Co., Ltd. It was incorporated in 1979 and Kazuhiro Watanabe took the post of president in 1982. The company was renamed as Carec in 2000. Carec joined SPN (currently JARA) in 2003. In 2004, the company's second plant was completed. The company has been growing year by year. In 2011, its warehouse and other facilities were damaged by the Great East Japan Earthquake. Nevertheless, Carec was actively involved in the disaster-relief efforts immediately after the quake, helping in many ways, including the collection of damaged vehicles (*Daily Automotive News, Nov. 15 issue*).



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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