

New activities (this section has been quoted from President Komaba's message.)

Here I will introduce the new projects that we are moving ahead with this year. Following on from my introduction to our start-up activities that I covered last month, our second set of activities involves the creation of an air purifier that removes bacteria with the use of ultraviolet rays from given spaces while the world is being shaken by another surge of COVID-19 triggered by the new omicron variant, which is currently causing chaos everywhere. We are still in the prototype stage, but a survey by a third-party organization has ascertained it to have performance levels approximately 1,000-times greater than air purifiers with the highest levels of performance currently available on the market.

In addition to supplying several companies with the prototype, we are also currently making certain revisions to die-cast nearly forty of the main components, and to prepare the processing and assembly lines for mass-production. We are intending to release it onto the market in the hope that it will contribute to a future in which we are able to coexist with viruses.

Our third set of activities involve a 3D metal printer, and we are currently carrying out various investigations to improve die-cooling capabilities. Initially, we are focusing on factors that cause on-site problems. Water leaks from the welds holding the upper cover in place on the coolant attachment's water conduit, and we are currently investigating using a 3D printer for producing and attaching a hybrid upper cover that can be replaced with minimal shots to prevent loss, and we are planning on completing a prototype within this year. At the same time, we are also developing a system in which the coolant attachment on the dies are produced with a 3D printer to replace the pipe currently imbedded so that effective cooling can be achieved in the required location and at the required volume.

Once we have overcome the novel coronavirus, I hope that we can welcome visitors back to see us so that we can introduce them to the many new projects we are working on, and I look forward to the time when I am able to greet visitors once again.

Automotive area (Toyota's EV strategy gains momentum: after a delayed start, Japan is stepping on the gas to claim the prize)

Japanese automobile manufacturers, who allowed Tesla of America and China to get ahead of them, will enter the field of electric vehicles (EVs) in earnest in 2022. The total number of EVs sold throughout the world on an annual basis has already overtaken sales of hybrid cars (HV), and there is a chance that electric vehicles will end up playing a leading role in global markets. How they manage to overturn this mature market will be an important point that will affect the future of Japan's automobile manufacturers, who created the era of the gasoline car.

"We won't be beaten in the competition against other companies." —Executive operating officer Jun Nagata emphasized his intention to strengthen business affairs relating to EVs and car-mounted batteries at the end of Toyota Motor's mid-term financial results briefing held on November 4th.

The EV market is rapidly expanding as the world moves toward decarbonization. Japan, which developed its own low-mileage technologies with HVs and light vehicles, etc., is late out of the blocks in the EV market.

According to America's EV Sales media, Tesla remains the irrefutable No.1 at the top of the world's EV car sales ranking for 2020, which includes plug-in hybrid vehicles (PHVs). European manufacturers occupy six of the places in the top ten, with Japan just managing to slide into the rankings at No.14 for Nissan and No.17 for Toyota.

Market share for the number of top twenty manufacturer units sold by region show both Germany and China with nearly a 30% share each, with Japan not even reaching 5%.

This is a growing market with the number of EV units sold in 2020 accounting for approximately 3% of the total number of new vehicles sold throughout the world, but this is rapidly increasing and there is a chance that it will overtake HV sales in 2022.

The year 2022 will see an EV rush for Japan. Nissan's Ariya EV will experience expanded sales, and SUBARU will release its first mass-produced EV. Toyota, which is the home ground of HVs, will also

release the bZ4X onto major markets in the latter half of 2022 as its first mass-produced EV. We are about to greet the first phase of merchandizing strategies, with fifteen different types of EV being available by 2025.

The electrification of vehicles has been approached in an omnidirectional manner up until now, and there are still many areas of EVs that remain unknown. The specifications of the bZ4X remained veiled after it was first introduced during the Shanghai Motor Show in April, but these were revealed on October 29th. A traveling distance of 500km on a full charge allows it to rub shoulders with the representative models by Tesla and Germany's Volkswagen (VW). In addition to in-house technology that extends the life of batteries, it also comes mounted with a large number of Toyota's groundbreaking technologies. Prior evaluations were favorable, with such statements as "This provides us with a peek at the intention to make up for lost time" (analyst). Toyota announced in May that its goal is to sell a collective total of two-million EVs and fuel-cell vehicles (FCVs) by the year 2030, which is the equivalent of 20% of the global market.

The foundation behind this is a total of 1.5-trillion yen being invested in the research and development of car-mounted batteries and the creation of a production system by 2030. Despite this, it has been criticized as "leaving the impression of being a moderate investment when compared against the relentless investment rivalry seen around the world" (spokesman within the industry), which will leave the field open for global rivals.



Source: Nikkei Business

Keihin Seimitsu Kogyo (IATF surveillance)

All of KSK's branches were inspected between November 8th and 11th as part of the IATF16949 surveillance activities.

We revised and reorganized our organizations after we received the previous inspections to enable KSK to move into the future.

However, all branches began preparing for this in the early stages, which resulted in only minor items pointed out, and the inspections were completed uneventfully.

Post-editorial Notes: (A walk alongside the Enoshima Railway)

The Enoshima Railway runs nearby to my home.

This railway, which runs from Fujisawa to Kamakura through residential areas along the coast, has flourished as a mode of transportation for local people. It once suffered through a period of red ink that threatened its existence, but the effects of it being featured in a trendy drama in the 1970s attracted more people, and it has remained a popular local line within the metropolitan area ever since.

One Saturday in November, I decided to walk along the entire railway line from its starting point at Fujisawa Station through to its terminal at Kamakura Station.

I began walking briskly after peeking through the ticket gates at the Enoden, as the Enoshima Railway is affectionately known, Fujisawa Station. It becomes an overhead line from the prior Ishigami Station and Fujisawa Station is located on the second floor of the Odakyu Department Store, making it a comparatively modern station. I walked alongside the Enoden past Ishigami, Yanagikoji and Kugenuma Stations as it moves towards Enoshima. One loses sight of the train once it crosses over the River Sakai, but it comes back into view at Shonankaigan Koen, and once it gets past Enoshima, it becomes a tram, which are rare in the Kanto region, until it arrives at Koshigoe, which anybody who is interested in the head office and Kanuma Plant will know well. I saw the Akitaya accommodation facility on the coastal road and thought back nostalgically to when everybody was drinking, causing a ruckus and throwing pillows around as I reached the coast. The sunshine along the coast was blinding... The road widened once I got passed Kamakura Koko Mae Station, and I continued walking. It felt wonderful to be bathing in the warm sunshine and surrounded by the salty tang of the sea. I took in the coral reef and bills, AMALFI Della Sera and other famous cafes and restaurants in the neighborhood of Shichirigahama.

The Enoden moves inland from the coast as it travels from Inamuragasaki to Gokurakuji. Gokurakuji Station once appeared in a TV drama, and there is a large and pretty public toilet located beside it. After that,

I walked past Jojuin as I headed toward Hase. This area bustles with tourists visiting Kamakura for sightseeing, and there are many sights worth seeing behind the station, centered around the Hasedera Temple and the Kotoku-in Temple (housing the Great Buddha of Kamakura).

Unfortunately, the railway does not run alongside a road in the vicinity of Yuigahama and Wadazuka, so I walked along the bus route as I headed toward Kamakura. I lingered around Kamakura Station during the congested period as the sun was setting, and pondered on what a nice area I lived in... while at the same time thinking about rewarding myself after such a long walk, so I headed toward Ofuna and entered one of my regular restaurants named U for a first visit in a long time.

I ordered salted mackerel and a bottle of beer. The beer was chilled to an extent that I couldn't imagine at home (a heartbeat away from being frozen), and it was served with a glass that appeared to have been just removed from the freezer (covered in frosted ice). I poured the beer into the glass and then chugged it down. Nostalgic heaven...!!! It tasted absolutely delicious! I then ordered sea-lettuce tofu, Chinese chives, bean sprouts and a jug of hot sake to warm me up, and allowed the hot sake to soak through my entire body. I felt wonderful after my walk in the warm sunshine... It was great to be alive...! Relishing in this feeling, I walked the 60-minute journey home alongside the river (it was still a little too early for karaoke) with J-pop music playing through my earphones as I sang along in a loud voice and walked along the dark and deserted road... I began to think about taking a walk along the Oshu Kaido this winter as the first evening of the winter drew to a close with me feeling warm and contented.

Kamakura Koko Mae: Comparing the New and Old



Roaring Alongside the Coast in 1965



Near Inamuragasaki in 1965



Departing



Enoshima



Entering Koshigoe Station



Roaring Alongside the Coast



In Front of Gokurakuji Temple



Evening at Kamakura Station

