



OIC 25TH ANNIVERSARY



Somerset, NJ

This year marks the 25th anniversary of Ogura Industrial Corporation. Ogura clutches and brakes have been sold in North America since the early 1970s. To serve our customers in North America better, Ogura created a direct sales channel for our outdoor power equipment, industrial and medical customers in 1998. Over that time, we have seen significant changes to our industries and have brought in many new products to help our partners, but our growth could not have been possible without the support and loyalty of customers.

We are proud that over the past few years with both Covid and logistics challenges we did not shut down or stopped supplying products to any of our customers. Through a combination of improvements from our factory lead times, and OIC holding supporting inventory, we were able to keep our customers' lines going even with the significantly increased demand from some industries.

The 25th anniversary logo is being used in our marketing and trade show graphics as a reminder to our customers that we've had a history of support to them over the past 25 years, but also as a reminder that we look forward to continuing serving our customers and markets for many years to come.●

NEW LOGO FOR OGURA INDUSTRIAL

Somerset, NJ

To communicate with all other Ogura divisions, Ogura Industrial is changing its logo to Ogura Clutch. The Ogura Clutch logo will become prominent in all digital and printed company literature.●



2023 SALES MEETING

Atlantic City, NJ



In September, Ogura Industrial held a training meeting for the sales reps for North America. The meeting was held over three days where Ogura's sales representative had a choice to attend nine different training seminars as well as general group sessions.

This is the first in-person group meeting since 2018. During COVID, all meetings were held remotely. Besides North American personnel, a meeting was also attended by senior management from Japan as well as representatives from Europe.●

NEW PRODUCTION LINE ADDED FOR HOLDING BRAKES

Kiryu, Japan

In 2023, the average monthly production of spring-applied holding brakes has almost doubled to where it was just two years ago. Looking ahead, Ogura sees additional growth opportunities and sees the requirements for holding brakes doubling again in the next couple of years. With this increase in business, it is now becoming more cost effective for Ogura to produce many of the friction disks in-house. The new production line will produce these disks with new manufacturing equipment that includes preforming, automatic press machines, thermoforming and surface grinding machines.●

Ogura Employee Profile

Kotoe Asami Controller

Hello, my name is Kotoe Asami. I'm from Japan. I started my career as an accountant, then obtained Certified Public Accountant designation.

I worked for a Financial Audit Firm for about 7 years, then I moved to the Internal Audit of commercial companies.

One of the company was located in Bermuda and I lived there about 5 years. It is a beautiful island except for high cost of living.

At that time, a hamburger at a regular restaurant costed about 20 US\$. The government charged 100% import duty, people admired a Toyota Corolla like a Lexus.

I am with Ogura only for 3 months, but I like the people and enjoy my work.

I look forward to meeting with more Ogura people. ●



Kotoe Asami

STADIUM SCOREBOARD LIGHTING CEREMONY

Kiryu, Japan

As was noted in last quarter's newsletter, Ogura is the current sponsor for Kiryu's baseball stadium which is now renamed Ogura Clutch Stadium. As part of the renovation, the City of Kiryu spent \$110,000 on a new full color LED scoreboard. Last quarter, the official lighting of the new scoreboard at Ogura Clutch Stadium took place with both senior officials from Kiryu City as well as Ogura Clutch Company.

Most recently, a game at the stadium was held featuring all stars from many colleges throughout Japan. ●



New scoreboard

WORLD'S FIRST LIQUID HYDROGEN COROLLA COMPLETES FUJI SUPER TEC 24 RACE!

Japan

Last quarter, the 2nd round of the Super Taikyu Series, the Fuji Super Tec 24 Hours

Endurance Race was held over three days in May.

This race is very memorable for the Rookie Racing team because it was the debut race of the GR Yaris in 2020, and the world's first debut race of the hydrogen-powered vehicle in 2021. In this year's race, the hydrogen Corolla has evolved, and the fuel delivery system was changed from gaseous hydrogen to liquid hydrogen.



Hydrogen Corolla



GR Yaris won it's class

Liquid hydrogen has a -253 °C temperature, but because it is liquid it was possible to compress the tank volume to 1/800 of the size compared to gaseous hydrogen. This greatly improved fuel capacity and cruising range. In last year's race, hydrogen was supplied directly from tank trucks, and because of their size had to be fueled outside of the pit area, but since the liquid hydrogen took up a much smaller space, fueling was now possible directly at the pit.

This liquid hydrogen Corolla competed in the 24-hour race with five people, including Morizo (Akio Toyoda, the Chairman of the Toyota Motors Corporation) and President Yasuhiro Ogura.

During the race, there was a problem with the pump, and it had to be replaced twice.

After that, there were no major problems, and at 3:00 pm on the final day, the car passed the checkered flag and finished the race. The GR Yaris won the overall victory in it's class which was the first time for the team. Overall, it was a good race day for both the gas and hydrogen powered cars. ●

Application Story

FOR A CLEAN, GREEN LAWN, SUCK IT UP!

Fall is almost here, and for 75% of the USA and Canada, that means autumn leaves. Autumn leaves means raking. And who likes raking? Maybe the kids, once you've piled them up, so they can jump into the pile and be scattered again. It is, however, a necessity if a homeowner wants a healthy, neat looking lawn through winter and into spring. Raking, mulching or bagging with a mower is an option. But it is time consuming and tedious work emptying bags continually, particularly for those with larger yards. There is hope, though for the zero-turn owners – the vacuum collection system.

Located in the Blue Ridge Mountains of Western North Carolina, PECO specializes in the design and manufacture of outdoor power equipment. For over 50 years, PECO has been the leader in the lawn vacuum industry. Tired of raking leaves from his yard, their founder developed a system that would revolutionize the way debris and leaves are collected. PECO, Inc. opened its doors in 1972 with a grass collection system that took the industry by storm.



Mower with Peco Blower



Ogura GT2 clutch

PECO offers a wide range of vacuum collection systems to fit most zero turn mowers and brands. The vacuum collection system is exactly as it sounds – grass, leaves and other debris are collected into a container or bin mounted to the rear frame of the mower. The material is transferred from the deck into a tube by an impeller which moves it into the container. What makes PECO's system different is the way it is powered. The unique design has even been granted a US patent. Unlike other systems, where blowers are mounted on the deck and driven off the deck spindle, PECO's blowers take their power directly from the engine. The most advanced of these designs, the PTO-X, features an electromagnetic PTO clutch/brake to control the impeller. This allows the blower to engage independently of the deck, which reduces start up strain on the engine and belts.

During the design of the system, PECO engineers came to Ogura with a challenge – to provide a long-life clutch/brake (in-line) coupling in a limited space that generates a high amount of torque to power the impeller. Also, the clutch assembly would be enclosed, exposing it to additional heat. The clutch would be belt driven from the engine to a parallel shaft. Working together, the engineers chose the Ogura GT2 as the base clutch. Relying on past experience to similar applications, the 110 ft.lb. model was chosen to power the impeller. To combat heat, high temp bearings were utilized. The clutches' flange bearing is a double row design to handle axial and radial forces. Initial testing was successful with minor systems changes and the PTO-X was introduced. After a number of positive seasons together, Ogura and PECO continue to work together to advance technology in both industries.



Clutched blower

To see the full line of PTO, General Purpose and other Ogura products, please visit www.ogura-clutch.com.



Ogura in the News

18TH BOWLES FARM ANNUAL MOWER RACE

Clements, MD

It was a beautiful weekend to be back racing in Clements with nearly 80 mowers showing up to compete. With 7 mowers in the BP class, Bobby and I had our hands full with some of the fastest mowers we have competed with.



Chuck and Bobby ready to go

Friday night Bobby started in the 4th position and Chuck started 7th. With a wild start going 3 wide into the first corner, it eventually settled down with no caution. Chuck worked up to 2nd place for the night with Bobby coming in 3rd.



Chuck and Bobby with trophies

Saturday resulted in the same tough racing with Bobby starting in the 3rd position and Chuck on the outside pole. Bobby got tangled up with a couple of lap mowers and finished in 4th place.

Chuck fought with the leader for 15 laps and got into the lead to only lose his brakes on his mower and lose the lead to finish 2nd again. ●

THE 28TH MECHANICAL TECHNOLOGY EXPOSITION

Tokyo, Japan

Last quarter Ogura exhibited at the Mechanical Technology Show at the Tokyo Big Site. General industrial clutches and



Trade show booth

brakes were the main products shown but there was a variety of new products exhibited as well. These new products are mainly focused on the robotics industry. The new robotic gripper was shown that can be used with many different robot arms. Also, exhibited was the new tool changer which can be used to quickly exchange tools for robotic arms. For holding brakes, the new combination torque limiter holding brake was displayed as well as the zero-backlash reduced noise brakes for robotics and medical equipment.

In the standard holding brake series, the new service life prediction system was displayed that can show the wear rate of holding brakes in real time to show their end of life before it happens allowing the brakes to be replaced prior to failure.

Also, during the show, Aperza TV interviewed Ogura personnel on Ogura's new products on robotics application. ●

NEW MEDICAL AND ROBOTICS BRAKES

Ogura's new MCNB-Z series Spring Applied Brakes are changing the way robotics and medical equipment designers look at power-off holding brakes. The product is spring applied type and truly zero backlash, which is unique. This means that loads can be held precisely when power is removed, improving the quality of the machinery and process. ●

