

61st KIRYU YAGIBUSHI FESTIVAL

Kiryu, Japan

In August, the traditional Yagibushi Festival was held. As in year’s past, Ogura set up a tower and had various dance teams made up of Ogura employees perform for the public. The Yagibushi Festival is a three day celebration held in August each year. It is the largest celebration in Ogura’s hometown of Kiryu attracting almost 500,000



Ogura sponsored geishas from Kyoto



Streets crowded with festival visitors

visitors. In 1964, various summer festivals were combined into one and in 1988, it was renamed the Kiryu Yagibushi Festival. The festival is a summer celebration, but it is also a competition by various dance companies with, of course, much music and many different food vendors. Besides dance competitions, there are group dances where visitors are welcome to join in. There is also a song competition which is the national Yagibushi song contest. ●

NEW MEDICAL EDITORIAL IN MACHINE DESIGN

Somerset, NJ

Ogura has seen increased activity with several medical/surgical robotics manufacturers over the past year or so. We also currently supply production parts to this market. Holding brakes are a key component

in these machines. The applications are in Ogura’s wheelhouse – reliable, robust, custom designs that are not always price sensitive. As the industry expands to include joint replacement, exploratory surgical and other machines, we have expanded the power-off brake line to accommodate the specific needs of the applications.

Ogura has authored an encompassing overview of how our brakes can provide engineers with the specific product and key performance specifications they require. It has been published online by Machine Design and a print version is to be printed soon. ●



Reconstructing Robotics for Modern Day Healthcare

Next-generation machines will integrate technologies to ensure proper functionality and patient safety. A holding brake—or, more specifically, an electromagnetic brake—is one of these technologies. Let’s learn about this critical component of robotics systems.

by Craig Harvey, Regional Sales Manager, Ogura Industrial Corp.

AS TECHNOLOGY CONTINUES TO eclipse previous achievements at a pace which seems to happen at an almost singular level, the field of robotics has shown unparalleled opportunities for seemingly endless possibility. When you pair the need for improved medical outcomes and consistent patient care with the ingenuity of the designers behind robotics, you find a niche like no other.

In the United States alone, healthcare spending exceeds \$4.5 trillion per year

and the costs are only rising. Companies are working to develop the next-generation of robotics platforms that will bring healthcare into a place where the cost-benefit matrix will be mutually beneficial for both patients and healthcare providers alike.

These next-generation machines will require integrating a multitude of technologies to ensure not only proper functionality, but patient safety as well. One of these technologies is used for precision

positioning or holding as well as safety redundancy, and is commonly referred to as a holding brake—or more specifically, an electromagnetic brake.

Electromagnetic spring-applied brakes are devices installed on a shaft via a hub that operate using electric voltage to generate magnetic flux to counteract a mechanical spring force which is used to create torque when power is removed from the system. Power-off brakes are disengaged—meaning the shaft is free to

Ogura Employee Profile

Brad Hofmeyer
HerringtonPT

I am a graduate of Northwestern College with degrees in marketing and finance and have over 20 years of sales management and operations experience with manufacturers. I also possess the distinctive professional CPMR designation (Certified Professional Manufacturer's Representative) which is an executive education program for top performing rep firm owners and managers. Back in 2011, I purchased this firm from Dave Hansen, and am a third-generation non-family owner. This year, HerringtonPT celebrates 40 years which is quite a remarkable achievement. Started by Al Herrington in 1984 with a phone book, a desk, and a passion to serve, I believe we are still carrying out the mission he had in mind when he began this firm all those years ago. In my career, I have enjoyed building relationships with customers, hunting for new business opportunities, and strengthening partnerships with manufacturers.



Brad Hofmeyer

My wife, Melissa, and I have four children and live in Manitowoc, WI. As a family, we enjoy traveling, golfing, boating, and spending time outdoors. In addition to supporting our kids' endeavors, I am involved in several church leadership positions and association boards. ●



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October 16 -18, 2024
Booth #2104

KANSAS STATE 1/4 SCALE TRACTOR TEAM

Kansas State

The Kansas State 1/4 Scale Tractor team took 2nd place again and just missed first place by a very slim margin. They are using the Ogura MA-GT-ST1W general purpose clutch and soft start controller. In 27 years of the competition Kansas State has finished in the top three 21 times and won 9 times. The last three year's finishes were all (2nd Place).

They build their own transmission and have the same configuration that they used last year. They use the Ogura general purpose electric clutch for shifting between first and second gears in the belt drive transmission. The clutches ride on the input shaft and allow them to quickly shift between gears without a loss of efficiency or power while under load. This is important as they are able to shift during pulls and change gear ratios on the fly in order to gain more speed on the track. These Ogura clutches allow them to shift into 2nd and gain speed at the start of the pull and shift back down into 1st gear in order to finish the pull.

When engaged, they power the bottom output shaft. Second gear has an overrunning clutch in it so that a shift back down into first from second will not cause a lag in power.



2nd place Kansas State team

They use the Ogura soft start controller in first gear and primarily use it for backing up to the pulling sled and pulling the chain tight. It is helpful in those regards by allowing for a less sudden and rough engagement of the clutches when dropping them in gear.

They will be using Ogura electric clutches and soft start controller modules again this next season. The new design season began in August 2024 ●

Application Story

Autonomous and UTV Electrostatic Ag Sprayers with Ogura Blowers

Willie Hartman, CTO and Owner of OnTarget Sprayers has been using Ogura's superchargers as precision air blowers in his next gen, high efficiency electrostatic spray systems.

With these new electrostatic systems, farmers are using 80 percent less water, 50 percent less horsepower and diesel, and 50 percent fewer spray hours to get great crops!

Willie on Ogura's blower, "It's super compact, 75% lighter than the others, and 30% more energy efficient. It allows us to develop ultracompact lightweight machines and get into several high-density growing markets we could not penetrate before."

Electrostatic sprayers are a three-part system: air, liquid and electrical. "We use Ogura's TX series blowers for compressed air and then we atomize the drops," Hartman said. The drops break down into 58-billion droplets per gallon of water. That's the secret to our success.

"Trees and plants are grounded." "Charged droplets repel each other and are attracted to the grounded tree or plant," so the electrostatic sprayer can get full, uniform coverage—around an apple, for example, or around a strawberry, grape or a hazelnut. It will also coat the underside of leaves, which is often where insect pests hang out.

Ogura's superchargers have been used in automobiles for decades bringing improved performance to both torque and horsepower. Recently Ogura has modified their superchargers to work with hydrogen for clean energy fuel cells and to supply high performance here in the Ag industry. With precision all aluminum construction, these blowers utilize a special coating on the rotors which act as both a seal for high efficiency and as protection from debris inadvertently entering the air chambers leading to exceptionally long life. These devices are now used to help save our planet by saving water, fuel and reducing the use of chemicals!



Electrostatic spray in action

These devices are now used to help save our planet by saving water, fuel and reducing the use of chemicals!



OnTarget sprayer with Ogura blower



Compact and lightweight Ogura blower

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



Happy Autumn from the Staff of Ogura

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Ogura in the News

29TH MECHANICAL COMPONENTS AND TECHNOLOGY EXPO

Tokyo, Japan

Last quarter, Ogura exhibited at the Tokyo Big Sight in the Mechanical Components and Technology Expo. The Ogura booth featured the latest clutch and brake technology, such as the newly designed zero-backlash holding brake, and the brake life prediction system for holding brakes.



New holding brakes on display

The booth also displayed the products that Ogura is developing for robot manufacturers such as the tool changer attachment and the robot hand. ●

BANGKOK AUTO SHOW 2024

Bangkok, Thailand

Last quarter, the custom car festival (Bangkok International Auto Salon 2024) was held for five days at Challenger Hall in Bangkok, Thailand. This was the 6th time that Ogura exhibited at the show.

The primary product promoted at their show are the ORC racing clutches. The new show booth monitors and panels made it easier for visitors to understand the advantages of the Ogura racing clutches. ●



Drift car with ORC clutch

LAWNMOWER RACING UPDATES

Clements, Maryland

In August, Chuck and Bobby competed in the Bowlens Farms race in Clements, MD. There were 112 mowers competing over two days. The primary purpose of the race is to raise money for Saint Mary's County EMS.



Chuck and Bobby with Bowlens Farms trophies

It was a great weekend for Team Ogura. In the BP Class, Bobby Cleveland grabbed 2nd place with his new rebuilt motor (as listed in last quarter's newsletter, Bobby's motor blew up in his prior race). Also, in the BP class, Chuck Miller finished in 5th place. In the FTX class, Chuck had his best race of the year with a 1st place finish. The only downside was that in the race on Sunday, Chuck broke the crankshaft on his engine and couldn't finish racing. ●



Chuck and Bobby headed out to the track for their next race