



EQUIP EXPO 2023

Louisville, KY

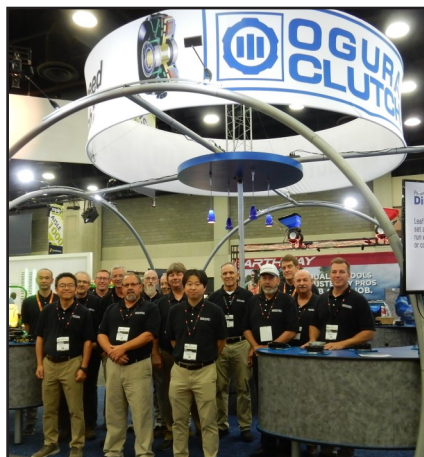
In October, Ogura Industrial exhibited at the Equip Expo. The show is always a great opportunity to meet up with customers and to talk to the landscapers that actually use our products on a day to day basis. Many of them had questions on how the clutches worked or how they could be serviced. The show was a great opportunity to show off Ogura's animations and instructional videos for both installation and troubleshooting.

The show was also the first unveiling of the Ogura Clutch logo. All Ogura groups around the world are now utilizing the same logo for all divisions.



The weather cooperated for visitors to check out the Ogura sponsored racing mowers and monster truck mower

currently sitting on inventory so it will be a slow start in 2024 for new machine production. The industry as a whole is solid and with a projected growth of 3-4%, production will normalize sometime during the second quarter of 2024.●



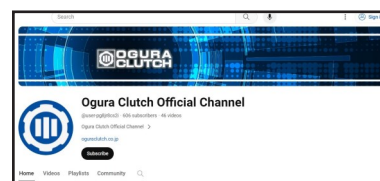
Ogura personnel with their 25th year shirts at the show booth

OGURA CLUTCH EXPANDS YOUTUBE CHANNEL

Japan

Ogura Clutch continues to expand its YouTube channel. Last year, the emphasis was on adding the descriptive animations on how clutches and brakes work. This past year, it has been adding videos for new products for ORC racing as well as showing videos of Ogura personnel participating in both sporting events and festival celebrations.

Recently, the fire support equipment videos were added to the site to explain how the fire hose cleaners and dryers work.●



SIX UNIVERSITIES ALL-STAR GAME

Kiryu, Japan

On August 26th, the Tokyo Six Universities Baseball All-Star game 2023 was held in Kiryu at the reconditioned Ogura Clutch stadium. Players were selected from each of Tokyo's Six Universities to play in this all-star game in front of a crowd of more than 5000 spectators.

Throwing the opening pitch was Yasihiko Inokoshi, a director and executive officer of Ogura Clutch.

The weather was perfect and both visitors and the residents of Kiryu city enjoyed a spirited game.●



Mr. Inokoshi throws out the first pitch

Ogura Sales Rep Profile

Renald Leblond Marktech

Hi, my name is Renald Leblond. I joined Marktech 18 years ago (2003), I cover the Province of Quebec and the Atlantic Provinces. I previously worked for a Plumbing distributor for 13 years as an inside sales representative. The best thing about my job is helping our customers find solutions to their needs. I'm married since 1996, so 25 years already! I have one daughter which is 23 years old. I live in Lévis, City facing Québec City, separated by the St-Laurent River. My favorite foods are Italian, Indian and anything spicy. I can't resist pecan pie and baklava. In my spare time, I enjoy the gym in the morning, walking, bicycling and traveling (especially to the Caribbean.) On my wish list, I want to learn Spanish to be able to handle basic conversations while traveling in the Caribbean.●



Renald Leblond

KANSAS STATE GETS 2ND PLACE

The Kansas State ¼ Scale Tractor team took 2nd place in the International ASABE ¼ Scale Student Tractor Design Competition. In 26 years of the competition Kansas State has finished in the top three 20 times and won 9 times. The last two year's finishes (2nd Place) were their best in the past several years.



Kansas State 2nd place team

The Kansas State tractor design is unique because it uses its own transmission. The tractor uses two GT5 General-Purpose clutches from Ogura. This gives them the ability to seamlessly shift gears without a loss in 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. With the Ogura clutches they are able to shift into 2nd and gain speed at the start of the pull and then shift back down into 1st gear in order to finish the pull at a higher torque. ●

A THANK YOU FROM STEVENS INSTITUTE OF TECHNOLOGY

Last quarter, Ogura Industrial received a Thank You from the president of Stevens Society of Automotive Engineers. Ogura donated a 250 ft lb electromagnetic clutch for Stevens Baja racing car. The clutch that was provided drives the front wheels of the car. Since 2022, all cars in the race are now required to have 4WD. In the Stevens car, there is a transfer case that takes the input from the CVT and powers the rear wheels. From that case, there is a shaft and a beveled gearbox that



Stevens Baja racing car team



Baja racer during competition

powers the front differential via a chain drive. The clutch is located between the bevel box and the chain so that the front wheel drive can be engaged on and off with a switch. The race was held in Washington state and although Stevens didn't do as well as they had hoped in the race, the clutch performed flawlessly.



Ogura clutch used to engage front wheel drive via chain

As Ogura has done in the past, colleges and universities requesting assistance for drive train components will continue to receive not only free clutches but also the support to assist with their design programs.●

Application Story

Are you ready for some football?

If you visit any of the professional football stadiums across the USA, you might see a familiar type of machine. Have you ever wondered how they keep the turf in game-ready condition, despite all the beating that it takes? The same goes for baseball and soccer stadiums, golf courses, and even turf horse racetracks. Boy, do they take a beating! What you may find is that many of them are reliant upon a Dryject machine to keep the surface ready for quick play. These machines are used by turf professionals as they aerate, top dress, and amend all in one pass.



Dryject turf aerator

Dryject and Ogura Industrial Corp. are celebrating their 25th anniversary in 2023, but they also have a special common bond, their place and reputation in the turf care industry. While Dryject designs and builds the entire machine, Ogura provides electromagnetic clutches that help them run trouble free. The electromagnetic clutches are used to engage and disengage an engine powered pump with the flick of a switch. Without power applied to the clutch, there is no torque transfer, but when power is applied, that's when things get pumping.



Ogura's GT3.5 clutch with direct mount coupling

Dryject's 4820 machine is powered by a 40HP Briggs engine. It uses Ogura's GT3.5-DC01 clutch with universal hub output to drive a 12GPM, 3000PSI water pump. The pump is driven inline through use of a flexible coupling that bolts to the clutch's hub output.

The Aquaject aerator uses a model MAE-04A pump clutch that mounts directly onto the pump with a 4-bolt flange. It is belt driven with a 2-groove pulley. It is powered by an 18HP Briggs engine, and drives a 5.5GPM, 4000PSI pump.



Smaller aerator for home owner use

The machines start with a high-pressure blast that creates an aeration hole in the root zone. Simultaneously, amendments are injected into the holes via the vacuum that is caused by the jets. This is an important process because what is below the ground is just as important as what is on the surface. With this pass, the surface has little impairment and is ready for play in a short time.

John Paddock, current owner of Dryject, says that he "Enjoys working with Ogura because the products are trouble-free, lead times are short, and are priced right!" Ogura appreciates a customer that is just as focused on delivering dependable and cost saving solutions to the turf care industry. For more information on Dryject and Aquaject products or to explore franchising opportunities, visit www.dryject.com.●



Ogura in the News

BANGKOK AUTO SHOW

Bangkok, Thailand

Last quarter, the custom car Bangkok International Auto Salon 2023 was held for a total of 5 days in Thailand. This was the fifth time that Ogura exhibited at this show. The focus product



ORC drift car on display



Drift customers talk racing

for Ogura at the show was Ogura's custom racing clutches ORC. The drift car from Thailand, that uses the ORC clutches, was on display at the



Show was well attended

booth. Besides the brochures printed in Thai, monitors were set up in three places in the booth explaining the product function through animation and also showing clips of the ORC car in the 25-hour endurance race at Chang International Circuit at the end of last year. •

LAWNMOWER RACING FINAL

Stevenson, AL

In September, Chuck Miller competed in the Mow Down ALS race in Chillicothe, OH. The fundraising race raised a little over \$11,000. In the race, Chuck started in the pole position and ended up finishing in 1st.



Chuck and Bobby prepping mower

In November, both Bobby Cleveland and Chuck both completed in the Gobbler 50 Race in Stevenson, AL. In the BP race, Bobby finished 2nd and Chuck ended in 3rd. However, in the feature race, they were dueling it out for 2nd place when Bobby had a belt failure. Because of the caution, Chuck was able to move up on the leader and finished in 1st place on the Ogura racing mower #303. In the FXT class, Chuck tried out a new custom made engine, but because of some throttle issues, wasn't able to achieve full speed and finished in 4th.



Chuck and Bobby in 2nd and 3rd place

Racing is over for the season but Chuck will be fine tuning his new FXT mower for next season which will start on January 13th in Avon Park, FL. •

TOKYO FIRE AND DISASTER SHOW

Last quarter, Ogura exhibited their fire and rescue products at the Tokyo International Fire and Disaster Prevention Exhibition. The flagship fire hose washer that has been used by many fire departments for years was displayed. The rechargeable hydraulic rescue tools which have been used by many emergency responders in Japan and throughout the world were displayed as well. •

