



OGURA NAMED SUPPLIER OF THE YEAR

Batesville, Arkansas

At the Bad Boy Supplier Meeting in July, Ogura was given the award of Supplier of the Year. Ogura was chosen as the top supplier from all of Bad Boy's current 65 key suppliers.

Ogura excelled in all main categories and was noted as having "outstanding quality, consistent on time deliveries" and although very challenging in 2021, "quick reaction time to changes in schedule." Additional comments were "Ogura provides immediate response to questions and general and technical inquiries."



Bad Boy Award



*AJ Cunningham, Bad Boy Buyer
with Glen Liles, Ogura Sales Rep*

AJ Cunningham, (Bad Boy Buyer) stated; "As a buyer handling 17 different suppliers, it was a great experience working with y'all. Representation and company support is exceptional, Ogura is always finding a way and you guys have always come through in a clutch (no pun intended)."

It is interesting that AJ should choose those words since Ogura's trademarked phrase is **"What You Need in a Clutch."** •

IF YOU CLEAN IT, THEY WILL COME

Kiryu, Japan

As reported in last quarter's newsletter, Ogura has acquired the naming rights from Kiryu Stadium (Ogura's hometown) and it will now be called Ogura Clutch Stadium.

To get the stadium ready, approximately 180 employees volunteered their time to spruce up the stadium. The group of 180 was divided into multiple teams that cleaned the spectators seats, benches, aisles, and restrooms. The teams also raked leaves and picked up any garbage outside the stadium.

The Kiryu city sports office was extremely grateful for the work that was done. The volunteer group will lend their time in the future, as needed to keep the stadium looking sharp. •



*Ogura employees
cleaning outside of stadium*



*Cleaning stadium
common areas*



*Cleaning the bleacher
area*

Ogura Sales Rep Profile

Gilbert Leblond
Marktech

Hi! My name is Gilbert Leblond, president of Marktech. I joined as an Ogura sales representative in May. Marktech's territory includes Ontario, Quebec and Atlantic Provinces. I joined Marktech in 1995 in inside sales and became owner of the company in 2007.

My background includes a mechanical technician degree as well as a marketing degree. One of my strengths is strategic thinking. I enjoy complicated, technical and commercial sales. To put it simply, I enjoy helping customers solve problems. Collective success is very rewarding and one of Marktech's shared core

values. Our sales purpose is helping our suppliers and customers succeed. When we do that, Marktech is successful.

My family and I live in Montreal, Quebec. I have two boys, Jonathan who is 11 and Luc who is 13. I enjoy hockey, both playing and coaching my boys as well as watching the Montreal Canadians.

My other interests include golf, hiking, swimming, skiing. My favorite food is Raclette Savoyarde and I cannot resist my morning dark roast double espresso. I suggest reading Tribal Leadership by Dave Logan and John King. The book had and has an impact on how I manage people in my business and personal life. ●



Gilbert Leblond

UMATT WINS 2021 INTERNATIONAL 1/4 SCALE TRACTOR COMPETITION

Manitoba

Because of COVID this year, the 2021 International 1/4 Scale Tractor Student Design Competition, was mostly

held virtually. Student teams were only awarded points based on the virtual events since only a handful of teams

were able to attend the competition in person. Virtual events took place via Microsoft Teams and included the students design presentation, defensive design and the overall design judging. The final awards were also based upon the background information on design cost and design logs submitted a month ahead of time.

The UMATT design is similar to a hybrid system. It takes advantage of a split torque transmission using an engine and an electric motor. The transmission is an EVT

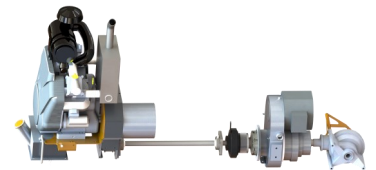
(electronically variable transmission). With the clutch disconnected, the transmission operates an electric drive, however when the clutch is connected, it combines power from both the engine and electric drive.

Ogura is proud to support the University of Manitoba and some of the other design teams that competed in this year's competition. More information can be found on YouTube under:

2021 ASABE IQS Student Design Competition Annual Banquet ●



UMATT Tractor



*Hybrid driveline with
Ogura clutch*

ACHIEVEMENT AWARD FROM MACI

Chesterfield, MI

In July, Ogura Corporation, in Chesterfield Michigan, received an achievement award from MACI. This award is given to suppliers who have made outstanding achievements in quality, price and delivery. Ogura Corporation was ranked first among 30 key suppliers. The award is the result of Ogura having zero defects, on time delivery and reliable cost controls.

The letter that accompanied the award expressed deep gratitude to all OC employees for their hard work. Ogura Corporation is proud to receive this award and will continue to strive for even greater production efficiencies. ●



MACI Award

Application Story

To Get the Job Done, You Can Push It or You Can Pull It

Everyone has heard of tugboats, small work boat moving around a large vessel in a port. Tugboats use a rope or cable to tow large vessels that cannot move easily in small spaces like ports. They can also push ships, guiding and assisting them to enter or leave a port safely. Some large vessels can move side to side with the help of a device called a bow/stern thruster, but when a crosswind is strong, the lack of power makes it difficult to maneuver. However, the powerful engine of the tugboat allows them to pull or push large vessels even when there is a strong wind or current.

Tugboats use a winch to tow the ship with a rope or cable. Hydraulic motors usually drive the winch to both unwind and rewind. To use the winch, the rope is attached to the ship, then it is unrolled and given enough slack so that the tugboat and the ship do not make contact. When the rope reaches the desired length, a device, integrated into the winch drum, locks the rope in place so it does not unwind, even if the tug is pulling with full power.

In newer winch drives, the hydraulic motors have been replaced by electric motor/gear box drives that reduce the chance of hydraulic oil leaking into the water and causing contamination. Many of these new winches use an Ogura electromagnetic multiple disk (MWC) clutch. The MWC is built into the sealed gear box and is made to run in the same oil as the gears inside the box. The advantage of using an MWC clutch is that you can disconnect the drum from the electric motor and speed reducer, so that the drum can rotate more freely which allows the rope to unwind at a faster rate versus the hydraulic drive.

When no power is applied to the clutch, the drive cup and friction discs are free to rotate. Separator springs between the friction discs keep them from contacting each other during rotation when the clutch is disengaged. When the drum is required to rewind, a simple switch provides 24V DC to the coil creating an electromagnet. The electromagnetic force inside the clutch attracts the drive discs squeezing the friction discs together, transferring the torque from the motor gear box to the drum. When the clutch is engaged, there is no slippage and torque transfer is 100%.

Since the clutch is contained inside the gearbox, it is shielded from the harsh salt air environment and also since the gear box is not pressurized, there is no chance of a high pressure leak like there would be with a hydraulic system.

Within the Ogura multiple disc family, there are two styles available. One is used in an oil bath like this tugboat application, but Ogura also offers an option to run multiple disc clutches without an oil bath, allowing the same advantages of high torque in a small space, while at the same time, allowing the clutch to engage and disengage on the fly, which would not be possible with other high torque clutches like tooth or jaw styles. •



Cutaway of Ogura MDC Clutch



Ogura multiple disc clutch family



Ogura in the News

LAWNMOWER RACING CHAMPIONSHIP

Wamic, Oregon

The Wamic Speedway in Wamic, Oregon, was host to the 2021 National Lawnmower Racing Championship. Since the Nationals were held on the west coast this year, Chuck Miller and Bobby Cleveland shipped their mowers in mid-August and because of logistics delays this year, the mower just made it before racing started on September 4th. Bobby and Chuck had heard from other east racers that west coast racers were fast and hard to stay with.

When the BP class race started, both Bobby and Chuck got off to a good start but had trouble keeping up with the leader, Garrett Penland who was racing on his home track. They were racing much faster than they were used to, clocking in on the straightaways at around 63mph and driving the corners hard on two wheels. Throughout the 15 lap race, all the front runners were pushing really hard with Chuck and Bobby in second and third pushing the leader. On the 13th lap, the leader's belt broke, putting him out of the race and allowing Chuck and Bobby to finish 1st and 2nd making it a one-two team win for Ogura. In the season's point standing, Garrett still had more points than Chuck and Bobby so he still won the overall points championship with Chuck and Bobby finishing 2nd and 3rd respectively.●



Chuck and Bobby with their 1st and 2nd place trophies

NEW SUITS FOR LAWMOWER RACING

Both Bobby Cleveland and Chuck Miller have new racing suits for lawnmower racing this year. The suits are lighter since they no longer need fire protection layers so the suits are cooler on the hot track. The custom design Simpson racing suits are lighter weight but extremely durable. The flames make them stand out on the track, but when both Bobby and Chuck are in the same race, it does give the announcers trouble identifying who is driving which mower. ●

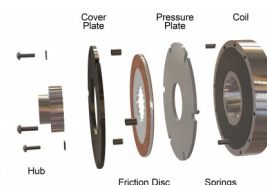


Bobby Cleveland and Chuck Miller pose with their mowers in their new racing suits

SUPER HIGH QUALITY ANIMATIONS

Somerset, NJ

Ogura Industrial has redone all of their animation videos. The animations were built in a new version of a 3D software tool. The notable new feature is a new unbiased render engine that allows much higher resolution. This allows the models to be built with greater detail from more complex polygons. In addition, model surfaces can contain realistic textures derived from actual image samples. Character rigging is part of the seamless animation system where just about every property of an object can be animated. The new software also supports output to 4K resolution. These new animations can be found on Ogura's website and Ogura's YouTube channel.●



Ogura animation videos get an upgrade

The monster is ready and will be unleashed at Ogura's outdoor booth at GIE Expo.....

