



New Manufacturing Plant For Mobile Clutches Planned For China



Artist's concept of new factory in China

Canton, China

Ogura's Board of Directors has announced that a new manufacturing facility, for the production of mobile clutches, will be built in the Canton area of China. 280,000 square feet have been purchased for the initial plant, parking and grounds area. The initial capital outlay for the plant and machinery is \$3.5 million. Mr. Yasuhiro Ogura (the CEO of Ogura Corporation worldwide) will also assume the role as president of this new operation.

The plant is scheduled to start initial assembly operations in January of 2004. The new facility is going to be primarily constructed to help Ogura strengthen its global competitiveness for air-conditioning clutches and to also supply automotive companies now manu-

facturing in China.

Besides automotive clutches, other mobile products such as lawn and garden products and even some industrial clutches and

brakes may also be produced at this facility. This will give Ogura a decided advantage in certain high volume markets where cost is the major concern.

2003 - 2004 Goals for Employees

For 2003 and 2004, Ogura has a new logo and employee goal. This is called the C⁴ & I². These are customer satisfaction, communication, command, control, improvement and innovation. All Ogura employees will strive to make improvements to these areas during this time.



- C⁴ Customer Satisfaction** 顧客満足
- Communication** 報告・連絡・相談
- Command** 指揮命令
- Control** 統制
- Improvement** 改善
- Innovation** 革新

New goals banner

OIC EMPLOYEE PROFILE

Yohei Tsuji Application Engineer

Hi my name is Yohei Tsuji. I recently joined Ogura Industrial as an application engineer. I originally came to the United States from Yokohama Japan when I was 9 years old due to my father's employment situation. I was very surprised by the fact that everything is enormous when I first came here. But now, everything in Japan seems tiny, whether it be the house, the yard, grocery store, people and so on. We lived in Battle Creek Michigan (the cereal city, if you didn't know), until I graduated high school. Over the years, my neighbors, friends, school and television have assisted me in my English skill.

After I graduated from high school, I moved to East Lansing Michigan where I pursued my Bachelor degree in product engineering. The reason why I went into this field is because my father is an electrical engineer.

During the course of attending college, I interned as a design engineer at Douglas Auto Tech, where we manufactured steering columns and AT shifters for GM, Ford, Mitsubishi and such. I also worked as a sales engineer at Pacific Engineering Corp (a manufacturer of automotive fuses). While there I visited both new customers and assisted with presentations at existing customers.

My parents were very excited when I graduated from college because I was the first one in the family to do so. During my time in college, I learned many skills to help me be on my own. I also learned the importance of working as a group but to also stand up for yourself. I think people showing individuality is the most attractive part of this country. In Japanese culture, we are taught to blend in with the group, but here, it's pretty much the exact opposite, so I really appreciate that part of American life. I hope to be able to contribute to Ogura and their customers.



Yohei Tsuji

Ogura Clutch Motor Sports Participation Ceremony Held



Drivers and support team for the 2003 Season

For the 2003/2004 season, a ceremony was held to introduce the new drivers and the new cars that Ogura will be sponsoring for this season. All 25 of the contract drivers were introduced, including 4 new drivers that will compete in the D1 Grand Prix.

The 10 person support team, which includes technical support, was also introduced along with the two teams that will lend support in the super endurance race.

Besides personnel, new cars were introduced. These were the ORC Advan RX7 that will compete in the super endurance race and the R32 Car.



New public relations personnel



ORC Advan RX7 and the R32 cars

APPLICATION STORY

NOT THE SAME OLD DAILY GRIND

Consider the challenges facing the engineers and designers of various types of construction machinery. How to provide a machine that meets all the performance criteria for a given job and be simple to operate and easily transportable? Operator convenience and safety are of obvious importance, not to mention the myriad of other details: ease of

assembly, serviceability, reliability, and simplicity to name a few.

Ogura electromagnetic PTO clutch/brakes were chosen by Rayco . . . The assemblies are ready to install and require no adjustment . . . and service is simple and straightforward.

complicate the traditional design challenges, the user of Rayco machines might be a trained professional or a weekend warrior that picks up a stump cutter from the local rental outlet. The machine for



Rayco's stump grinder

Rayco Manufacturing Inc., in Wooster Ohio manufactures a broad range of stump removal machinery and material handling equipment for the tree care industry. To

this user has to be simple enough to operate that a few minutes of instruction is enough to get the job done. For either user an Ogura clutch helps make the job a lot more convenient to operate the stump grinder.

To operate the stump grinder, the operator starts the engine and then with the flip of a switch Ogura clutches transmits the power from a 25 horsepower gasoline engine to the machine cutter wheel. The 18" cutter wheel has 1" teeth, that spin at 1,000 rpm and can

reduce a 24-inch diameter tree stump to a pile of chips and saw dust in a matter of minutes. What once was a day of backbreaking work cutting out a stump is a quick and effortless grind. It's about as much effort as grinding beans for morning coffee.

Ogura electromagnetic PTO clutch/brakes were chosen by Rayco to meet their design objectives. Installation in production is simple and convenient. The assemblies are ready to install and require no adjustment.

Forged rotor construction means they'll handle the rigors of outdoor usage and service is simple and straightforward. A single mounting bolt is all that's needed to attach the clutch or clutch/brake to the engine crankshaft. Add a 12-volt connection and it's ready to smoothly transmit engine torque to the cutter wheel. The operator remains safely away from the cutting tool and controls engagement with a simple

switch. Safety is enhanced when "operator presence" switches are incorporated. Releasing the controls disengages the clutch and power to the implement is interrupted.

Ogura clutch and clutch/brake combinations are available in torque capacities from 90 lb.ft. to 350 lb.ft. and

can be easily adapted to any application. Output can be belt driven, chain and sprocket driven, or directly coupled to a drive shaft. In choosing Ogura Rayco considered the benefits of single bolt mounting, no adjustment required, easily controlled from remote locations, the right size for the right application and the engineering support and expertise of the world's largest producer of electromagnetic clutches and brakes to back it up.



Electric clutch

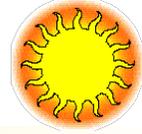


Stump grinder in action



OGURA INDUSTRIAL CORPORATION

P.O. Box 5790, 400 Cottontail Lane, Somerset, NJ 08875-5790
Tel: 732-271-7361 • Fax: 732-271-7580
E-mail: ogura.nj@ogura-clutch.com
Web Site: www.ogura-clutch.com



Happy  Summer from the staff of **Ogura Industrial**

NEW PRODUCT RELEASE

Ogura becomes a supplier to the aircraft industry

Ogura has long been recognized as a quality manufacturer of machined components. This expertise was also noticed by Sumitomo Precision Industries. Sumitomo requested Ogura's assistance in manufacturing the landing gear for small commercial (regional) jets. It was a big decision for Ogura to make to get involved with supplying components to the aircraft industry. The industry is highly regulated and the quality of components has to be superior. After considerable discussion, Ogura decided to take on this challenge of supplying these parts. Engineering felt that it would be a true test of Ogura's quality to see if they could produce aircraft quality components.

As of April 3, 2003 Ogura passed first article inspection through Sumitomo for the hydraulic actuator. Along with this actuator, Ogura will be providing bypass valves, which are used in the hydraulic system. These function as emergency relief valves in case

the pressure in the jet's hydraulic system is exceeded. The other product that they will be providing is engine starter clutches. Unlike starter clutches used in cars, which can only be used when engines are not rotating, starter clutches for jet engines need to have the ability to restart the engine while it is running (in flight).



Regional jet that will use Ogura components

All three products are being manufactured at Ogura's Plant #1 in Kiryu, Japan. This is the same plant that produces high-precision industrial clutches for Ogura's customers worldwide. It is hoped that with Ogura's entrance into the aviation field, that Ogura's current

customers see that Ogura has a continuing desire to raise the quality bar even further and to take on new challenges that can utilize Ogura's manufacturing and technology expertise.



Hydraulic landing gear



Hydraulic bypass valve



Engine starter clutch

New Employees Join Ogura in Japan



Mr. Ogura with new employees

Kiryu, Japan

Ogura's fiscal year in Japan runs April - March. With April being the start for the new budgets for each department, it is usually the time when the largest group of employees is hired by Ogura. This year 28 new employees joined the company, approximately half of these will work as engineers or technicians. The balance will assume administrative or manufacturing roles.