# OGURA on the move

Volume 5 Fourth Quarter • 2000

## Industrial Test Labs Updated



New test lab.

The industrial test labs at Ogura have been improved to handle more types of clutches and brakes on a wider variety of tests. This new machinery will help Ogura engineering provide confidence by simulating some of the basics of customers' applications, which should help reduce the test time on customers' machinery.

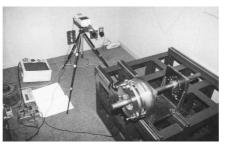
Besides improving the current cycling test, Ogura has also produced machinery to accurately torque test some of the larger industrial clutches and brakes. They can now easily bench test units up to 18,000 lb. ft. of torque. Simulators have also been added to duplicate temperature and humidity environments. These simulators can test clutches for any possible combination of temperature and humidity.



Environmental testing lab







Sound proof room

# Sales Reps Visit Japan



Left to right: top row Kelly Monroe, Robin Monroe, Louis Dennis, Ron Schwandt Bottom row: Frank Flemming, Cathy Flemming, Gloria Dennis, Gail Schwandt, and Fred Cacace

In October Ron Schwandt and Louis Dennis, from J.T. Chapman Co., and Robin Monroe, from Monroe Sales Co., had an opportunity to visit Ogura's manufacturing operations in Japan and learn about the latest production advances that Ogura has been making. They were accompanied by Frank Flemming (OIC's President) and Fred Cacace (Industrial Product Manager).

Il five manufacturing plants were visited. (Each of Ogura's manufacturing plants specialize in particular products.) By having some of the top sales personnel from the US in meetings with each of the product specific plant personnel, it gave Ogura's manufacturing and engineering direct input for the needs of the customers in their territories.

#### New Personnel at Ogura



Tara Hahn

Tara Hahn has recently joined Ogura Industrial as dministrative ssistant for the sales order processing group. Tara is a recent graduate of the Citone Institute. She has recently used her expertise in helping the order entry department make up a master delivery schedule, which coordinates and groups all incoming shipments. This new system will allow Ogura Industrial to identify production orders that are falling behind before they become delivery critical with our customers.

#### **Motion Components**



(Left to right) Reed Beiner, Ed Reese (President), Martha Reese and Tom McGill

otion Components was recently hired to represent Ogura in the southern California and southern Nevada territory. Motion Components was established in 1992 and specializes in electromechanical components for linear and rotary motion controls for OEM applications. They currently have three outside salesmen and one inside salesperson servicing the area. The President, Ed Reese, has thirty years experience in the sales territory and the staff has a combined total of over 80 years experience in technical sales and marketing, (a majority of those years working with electric clutches and brakes). Their strength lies in their ability to provide first line technical support to their customers.

#### Separator Cleans the in



Oil Mist Separator 2200

Many of Ogura's manufacturing plants have highly automated machining centers. With the volume of machine parts that go through Ogura's manufacturing process, there is an opportunity for a substantial amount of oil mist to be generated in the air. To help combat this potential air borne contamination, Ogura has developed "oil mist separators". These have been used very effectively to reduce air borne contaminates. (This is one of the factors that allowed Ogura to qualify for ISO14001.) Ogura has now offered these oil mist separators for sale to our current customers. If you feel that your operation could benefit from this technology, please contact us.

# OIC Joins EETC



Certification

gura Industrial has joined the Equipment and Engine Training Council. The EETC's principle is to help train qualified technicians for the outdoor power equipment industry. Ogura believes that by helping to financially support the EETC today, it will help to ensure qualified professionals in the future.

#### Ogura Magnetic Particle BrakeProvides Computer Controlled Tension.

A new Sign Printer uses 4 inch wide spools of colored foils that are heat transferred to a moving sign medium like paper, vinyl, plastic or Mylar. For proper print registration and uniform appearance, the colored foil must be applied using a constant tension or drag (friction, not queen) on the unwinding spool. This "tension" controls the amount of "stretch" applied to the foil.

Different thickness of foils can be used in one machine and the brake system needs to be intelligent and flexible enough to provide just the right amount of tension for each material. In addition, the tension must be held constant regardless of temperature, RPM, or the amount of foil left on the spool.



Programming a job



Running a job

To achieve this, the customer chooses Ogura's variable torque OPB-5N Magnetic Particle Brake. The brake is coupled directly to the unwinding spool of foil. Each full spool is loaded into a cartridge. Each cartridge contains a microchip programmed with the amount and thickness of the material. This chip will also remember how much material has been used and how much is left on the spool. (This feature also insures that you do not run out of foil during a print operation). shaft encoder monitors the shaft speed and the computer counts the total revolutions of the spool. With the spools turning at 30 RPM, the brake slip torque is computer controlled as the foil is deployed.

How It Works: The output shaft is rigidly coupled to an internal brake rotor. Surrounding this rotor is an air gap that contains unique ferrous particles. When current is applied, the particles form chains along the magnetic force lines through the rotor to the brake housing. The brake

rotor is then restrained (from turning) by these magnetic chains. The amount of restraint (torque) is linearly proportional to the brake's input current. To keep the brake torque constant, the computer monitors and adjusts the amount of current going to the brake.



Replacing a cassette

nother important feature of our Magnetic Particle Brake is its very long operational life. Unlike conventional friction type brakes, Magnetic Particle Brakes do not appreciably wear while providing this controlled torque.

This customer solved many complex machine problems by using Ogura's OPB-5N Magnetic Particle Brake. Their new Sign Printer works better than they imagined. The engineers were able to provide a level of control and product quality previously unobtainable in their market.

#### Ogura In The News

C PPING M CHINERY M NUF CTURER EXCELS WITH OGUR



Design News article about US Bottlers

In October, Design News ran an article featuring the Ogura PHT Hysterises clutches for US Bottlers Machinery Company in North Carolina. The article highlighted Ogura's ability to accurately control the tensioning of screw on bottle caps. Tension is critical because if the cap is too tight, the containers become difficult to open; if it is too loose, leakage or contamination can be a problem.

To overcome the harsh environment that these cappers go into, Ogura developed stainless steel component parts to withstand the caustic environments. The article also highlighted the "PHT" ability to operate over long periods of slip time with virtually no wear and the advantages of the PHT clutches versus pneumatic or friction designs. (Since there is no frictional contact in the Ogura units, there is no breakaway torque when the unit starts to slip. With friction devices or pneumatic devices, it is sometimes possible for the breakaway torque to exceed the required tightening torque on the cap.)

But the biggest advantage of the Ogura PHT clutches was summed up by the president of US Bottlers, who said "What's nice about these clutches is their lack of a need for maintenance."

If you didn't get a chance to see this article in Design News, please log on to the Ogura web site at <a href="https://www.ogura-clutch.com">www.ogura-clutch.com</a> and you can view a copy of it in the Editorial Section.

#### New Product Release

24MM BORE ELECTRIC CLUTCHES FOR PUMPS

ver the past few years there has been a substantial increase in the number of electric clutches used on pump applications. Many of these pumps are manufactured outside the U.S. and have "metric" shafts.



New 24mm pump clutch

The newest mobile clutch in the Ogura family is a clutch that accommodates a 24mm shaft. To be able to produce this design and still keep the same basic pulley and coil size, the hub forging was increased to accept a 24mm bore. In addition, a thinner race double row bearing was added to the assembly. By making these two changes, the larger shaft could be accommodated. Ithough a thinner race bearing was used in the construction of this clutch, the clutch actually has greater load capability over the previous single bearing design because of the double bearing construction.

#### ELECTRIC CLUTCHES ON THE GO



rticle in Machine Design Magazine

In October, Machine Design ran an article explaining the advantages of Ogura electromagnetic clutches for mobile applications. The article described the basic functions of an electric clutch can offer the end user.

dvantages, such as cold weather starting, safety, reduced power consumption, increased life and powering multiple components, were explained in detail in the article.

If you missed this article in Machine Design, you can access it in the editorial section of our web site at www.ogura-clutch.com

Ogura Industrial Corp.
P.O. Box 5790 • Somerset, NJ 08875
Tel: (732) 271-7361 Fax: (732) 271-7580
E-Mail: info@ogura-clutch.com
Internet: www.ogura-clutch.com

#### New Personnel at Ogura



Tara Hahn

Tara Hahn has recently joined Ogura Industrial as dministrative ssistant for the sales order processing group. Tara is a recent graduate of the Citone Institute. She has recently used her expertise in helping the order entry department make up a master delivery schedule, which coordinates and groups all incoming shipments. This new system will allow Ogura Industrial to identify production orders that are falling behind before they become delivery critical with our customers.

# Motion Components



(Left to right) Reed Beiner, Ed Reese (President), Martha Reese and Tom McGill

otion Components was recently hired to represent Ogura in the southern California and southern Nevada territory. Motion Components was established in 1992 and specializes in electromechanical components for linear and rotary motion controls for OEM applications. They currently have three outside salesmen and one inside salesperson servicing the area. The President, Ed Reese, has thirty years experience in the sales territory and the staff has a combined total of over 80 years experience in technical sales and marketing, (a majority of those years working with electric clutches and brakes). Their strength lies in their ability to provide first line technical support to their customers.

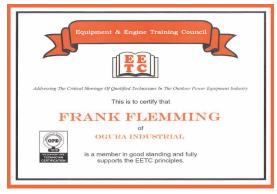
#### Separator Cleans the ir



Oil Mist Separator 2200

Any of Ogura's manufacturing plants have highly automated machining centers. With the volume of machine parts that go through Ogura's manufacturing process, there is an opportunity for a substantial amount of oil mist to be generated in the air. To help combat this potential air borne contamination, Ogura has developed "oil mist separators". These have been used very effectively to reduce air borne contaminates. (This is one of the factors that allowed Ogura to qualify for ISO14001.) Ogura has now offered these oil mist separators for sale to our current customers. If you feel that your operation could benefit from this technology, please contact us.

# OIC Joins EETC



Certification

gura Industrial has joined the Equipment and Engine Training Council. The EETC's principle is to help train qualified technicians for the outdoor power equipment industry. Ogura believes that by helping to financially support the EETC today, it will help to ensure qualified professionals in the future.

### Ogura Magnetic Particle BrakeProvides Computer Controlled Tension.

To achieve this, the customer

A new Sign Printer uses 4 inch wide spools of colored foils that are heat transferred to a moving sign medium like paper, vinyl, plastic or Mylar. For proper print registration and uniform appearance, the colored foil must be applied using a constant tension or drag (friction, not queen) on the unwinding spool. This "tension" controls the amount of "stretch" applied to the foil.

Different thickness of foils can be used in one machine and the brake system needs to be intelligent and flexible enough to provide just the right amount of tension for each material. In addition, the tension must be held constant regardless of temperature, RPM, or the amount of foil left on the spool.



Programming a job

chooses Ogura's variable torque OPB-5N Magnetic Particle Brake. The brake is coupled directly to the unwinding spool of foil. Each full spool is loaded into a cartridge. Each cartridge contains a microchip programmed with the amount and thickness of the material. This chip will also remember how much material has been used and how much is left on the spool. (This feature also insures that you do not run out of foil during a print operation). shaft encoder monitors the shaft speed and the computer counts the total revolutions of the spool. With the spools turning at 30 RPM, the brake slip torque is computer controlled as the foil is deployed.

How It Works: The output shaft is rigidly coupled to an internal brake rotor. Surrounding this rotor is an air gap that contains unique ferrous particles. When current is applied, the particles form chains along the magnetic force lines through the rotor to the brake housing. The brake

rotor is then restrained (from turning) by these magnetic chains. The amount of restraint (torque) is linearly proportional to the brake's input current. To keep the brake torque constant, the computer monitors and adjusts the amount of current going to the brake.



Replacing a cassette

Running a job

nother important feature of our Magnetic Particle Brake is its very long operational life. Unlike conventional friction type brakes, Magnetic Particle Brakes do not appreciably wear while providing this controlled torque.

This customer solved many complex machine problems by using Ogura's OPB-5N Magnetic Particle Brake. Their new Sign Printer works better than they imagined. The engineers were able to provide a level of control and product quality previously unobtainable in their market.

Can we do the same for you?