

MOBILE CLUTCH MANUFACTURING FACILITY IMPROVES ROTOR PRODUCTION

Kiryu, Japan

The Akabori manufacturing facility in Kiryu, Japan produces all of the Mobile, General Purpose and PTO clutches that are sold by OIC in North America and Europe. One of the lines that handle specialty rotors was recently changed from an inline conveyor type assembly to a cell production process.



Old conveyor type production line

The original manufacturing line had four workers performing the bearing press/ staking operation, axial run out, alignment, friction surface flatness, perpendicularity, visual inspection and packaging. This line was able to handle 68,000 pieces per month and had a cycle time of six seconds.

To automate this process two separate cells were created. Each cell is manned by one worker. The bearing press/staking and friction surface inspection is now totally automated (the new automated staking mechanism can automatically adjust for different bearings and different size rotors where the previous system had to have the sensor adjusted manually). To increase flow speed, linear actuators are now being used instead of pneumatic actuators. The actuator is used to transfer the rotor from the staking operation to the inspection operation (the loading chuck was redesigned to allow for a "one touch" release



Automated rotor inspection



Automated bearing/staking



New U-shaped production cell line



Quick reference jig storage

of the part after surface inspection). A compact inspection device was created to minimize floor space which allowed two cells to be created but only take up the same amount of floor space as the previous inline conveyor system.

To allow operators to visually see which jigs are being used when different rotors are running a jig table was created for both cell operators to share.

Although the production rate is equivalent to where it was with the four man line, the new cell operation eliminates two workers providing a cost savings. In addition, it allows more flexibility when running special rotors because each line can now handle a different size rotor running at the same time. One additional benefit is that since each cell is fully operated by one person it gives each worker control over the manufacturing process. This type of individual responsibility helps promote ownership of the process which can add to further improvements in the future.

OIC PROFILE

Tom Sulfaro Sales Representative

Hi, I'm Tom Sulfaro, and I have recently partnered with Ray Kay of the P.W. Vinton Company. Ray has been a longtime, well liked, and well respected representative for Ogura and I am proud to represent Ogura in the same tradition.



Tom Sulfaro

I bring almost 30 years of engineered component sales experience. I started with Delaval Turbine in the late 70's and then Sumitomo Corp. for 7 years as district sales manager, where I had to develop the business from the ground up.

In 1985, I established my own rep company: Integrated Drives & Controls, Inc. I have been selling both mechanical and electrical components since then. Ogura Clutch is a perfect fit and I am quite impressed with the Ogura products and the Ogura organization.

I have a degree in business from Eastern Michigan University and also have 2 years of formal engineering from the University of Detroit.

I spend a lot of my leisure time with my family. I take great pride in my wife, Emily and my son, Nicholas. We like to travel together and have been to Europe twice, as well as countless trips to the Caribbean and skiing. I love to dabble at golf (summer), tennis (winter), as well as gardening (roses and vegetables.)

I am happy to be part of the Ogura team and look forward to a long and successful relationship.

New Japan Personnel for 2006



New hires for 2006

Kiryu, Japan

April 1st marks the new fiscal year for many Japanese manufacturers. It is also the traditional day when new employees are hired. This year Ogura has hired approximately fifty new engineers, technicians and support personnel for their manufacturing operations in Japan. This marks the 78th hiring cycle that Ogura has had since the company was formed.

Ogura Manufacturing Continues To Go Green

Always looking for ways to help the environment and reduce manufacturing costs the production plants in Kiryu (specifically the ones responsible for the mobile and lawn and garden products) have found a way to do both with their trash disposal.

In Ogura's manufacturing process there is a lot of paper and plastic sheeting that is used to protect parts that are being shipped in from subcontractors. In the past this paper and plastic was simply thrown out and hauled away for disposal. This costs around \$2,200 a month.

In Japan there are thermal recycling facilities that can accept certain types of trash that when burned are very effective in producing electricity. Ogura's waste from manufacturing fits this need very well.

Since the facility that uses this waste to produce electricity is far away, a compactor was purchased which reduces the waste to 1/5th of its previous size, making it more cost effective for transport. Although the facility charges for the waste, it is minimal compared to the previous disposal method.

Even though food and other trash items are still taken away by the traditional hauler, the net result, by switching to this process, is a savings of around \$1,000 a month. This savings will almost cover the cost of the compactor in one year, so in the future it will provide an ongoing cost savings as well as savings for the environment.



Bundles of compacted plastic and paper

APPLICATION STORY

"LOOKS GOOD ON LIPS"

New Lipstick production line equipped with Ogura PHT Permanent Magnet Clutches

Allied Automation, an innovative company from Ireland, has developed a new Lipstick production machine. The formulations and production processes used in the manufacture of lipsticks play a key role in the strength of the final product. The new lipstick production line can produce up to 3600 units per hour.

Allied Automation has chosen the Ogura PHT 1.2D unit to guarantee a consistent and reproducible slip during the wind-up process.

top of this tube of lipstick. A set of three jaws then clamp the base tubes and wind the auger into the lipstick. This winding process turns at approximately 200 RPM. The Ogura PHT 1.2D is set to approximately 1 pound inch of torque. As the base with

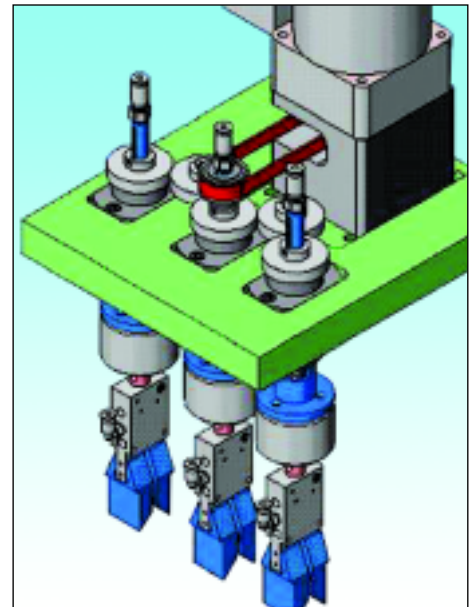


the auger is wound into the lipstick, it bottoms out. At that point the Ogura PHT permanent magnet clutch slips and goes into its torque limiting mode. Too much torque and the lipstick auger would be stripped inside the lipstick. Too little torque and the lipstick would not sit all the way in the tube.

Since the Ogura PHT clutches transmit this slip torque magnetically, instead of via friction, high volume accuracy is achieved tube after tube.

In the final process the tubes are picked up three at a time and go into an indexing table which rounds off the end of each lipstick.

Allied Automation has chosen the Ogura PHT 1.2D unit to guarantee a consistent and reproducible slip during the wind-up process. This is because the PHT clutch/brakes operate on a hysteresis (magnetic) principle. This allows torque to be transmitted without frictional contact so the units are virtually wear free. No external



Three Head Lipstick Winder

electrical connection is required; therefore, units function independently from power fluctuation. Another major benefit is that each unit can be adjusted within its given torque range, this allows the user to fine tune the torque to meet their requirements.

Since there is no frictional contact no wear particles are produced, keeping the machine, lipstick, and more importantly, lips everywhere looking pure.



Ogura PHT 1.2D Clutch



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Wishing you a safe and happy

Summer

from the staff of
Ogura Industrial

OGURA IN THE NEWS

8TH Annual Ogura Clutch Cart Race Held

Kiryu, Japan

During the first quarter of this year drivers from Formula Nippon, Super GT, D1 Grand Prix and others participated in the Ogura Clutch Cart Race. There were over 1700 spectators in attendance to see the race. There was also a driver talk show and charity auction held along with some special two person cart races and a demo run by the reigning P C W R C champion.



Winner of the race, driver
Masataka of Kondo Racing



Cart racing drivers, pit crew and support personnel



Quality, Production Improvement and Delivery Awards

Ogura Receives Quality Vendor Awards From Keihin

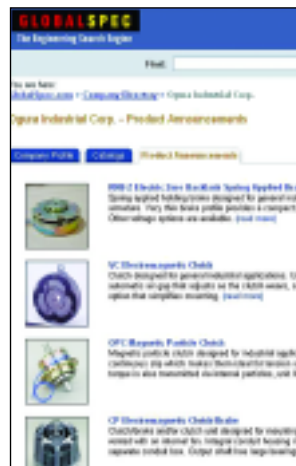
Keihin Corporation is an air conditioning compressor manufacturer supplying a variety of car air conditioning compressors to the automotive industry in Japan. In the first quarter 2006 Ogura Corporation was awarded their Product Improvement, Quality and On Time Performance awards.

Ogura Joins GlobalSpec

Somerset, NJ

Ogura Industrial Corporation has chosen to list their products with one of the major search engines in the engineering community, GlobalSpec. GlobalSpec has individually listed 481 of Ogura's clutches, brakes and clutch/brake units. Within GlobalSpec's search engine is an option to import application requirements to help narrow the search for the most appropriate clutch or brake. The online catalog has a separate detailed spec sheet as well as PDF for each clutch or brake and groups the Ogura products based upon their design.

In the product announcement section there are 25 different products featured with links to additional information on each product. To give perspective customers an overview of the company, a new profile sheet was also created with pictures showing a sampling of Ogura's product line.



Product announcements on GlobalSpec

Catalog: Electric Clutches
from: Ogura Industrial Corp.

Too many choices? Filter your results

Products 1 - 15 of 257 in this product category Page: 1 2 3 4 5 6 7 8 9 10 Next

Product Name	Product Information	Contact Supplier	Temp. (°F)	Power (HP)	Speed (rpm)	Viscosity (cSt)
AMC Series - Model AMC-10	See specs Go to Web site View PDF	Request quote Send Email	0.7	0.0080	3600	24
AMC Series - Model AMC-2.5	See specs Go to Web site View PDF	Request quote Send Email	0.2	0.0040	3600	24
AMC Series - Model AMC-20	See specs Go to Web site View PDF	Request quote Send Email	1.5	0.0080	3600	24

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Reference
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