OIC Develops New Mobile Ads

To help make mobile customers aware of the advances Ogura is making in electric clutches, three new ads have been developed. These ads will be running in Machine Design, Design News, Outdoor Power Equipment and Pneumatics and Hydraulics magazines.

The PTO clutch/brake ad highlights the advantages Ogura can offer for lawn and garden tractors and commercial equipment users.

The new ad shows that by putting electric clutches on pumps, end users can save energy costs and increase component life.

The new ad highlights the convenience and increased components life from using electric clutches.

This is COOL

Ogura currently has over 500 machine tools operating in plants worldwide. Many of these machining operations have to hold extremely high tolerances. Ogura production engineering realized that some tolerances could drift as the temperature and speed of the machine increased. Depending upon the tolerance and the temperature, some of this drifting could occur in around two hours. Since the existing machine cutting oil cooler could not supply the cooling needed to stabilize the tolerance drift, Ogura production engineering developed an add on rapid cooler, the “Ogura Jet Cooler”.

These new jet coolers can double the time between recalibration due to temperature rise. A machine that previously required recalibration or cutting bit replacement in three hours could now run six hours. The jet action also pushes coiling cut steel away from the work making the operation more efficient.

Many Ogura customers in Japan became aware of the potential productivity improvements of these coolers and wanted to buy them from Ogura. In 1997, these became available in Japan. These units are now available in the US and can be purchased back through the machine tool manufacturer. If your machine tool manufacturer cannot provide these to you, please let us know.

Ogura Mobile Clutch Helps Put The Brake On Electric Bus

The pollution caused by diesel driven buses and garbage trucks used in urban areas with poor air quality pose health and environmental concerns. The elimination of the diesel exhaust along the roadways and in heavily populated and urban areas is a goal many communities are trying to attain.

Ogura is currently working with one company, which is outfitting new and retrofitting existing vehicles with a “Hybrid Electric” conversion. The standard diesel engine is replaced by a propane powered microturbine engine which has been certified by the California Air Resources Board as having emissions that are as much as 250 to 500 times lower than propane powered reciprocating engines. Although the engine is smaller in horsepower than the standard diesel engine, it runs continuously at its most efficient speed, driving a generator. Electric motors that are regulated by a Variable Frequency Drive are used to drive the wheels. When the generator is producing more power than the vehicle needs to run on at the desired speed, the excess power is used to charge a series of batteries. The hybrid-electric vehicles overcome two main disadvantages of dedicated electric vehicles. The first is a limited range between recharges and the second is the extended time needed to recharge the battery packs. With the micro-turbine keeping the batteries charged, there is no need for daily vehicle down time.

Ogura Industrial is supplying a mobile general purpose clutch for a unique application on this vehicle system. Since power consumption is kept at a minimum, the clutch is used to drive an air compressor which provides compressed air for the vehicle’s air brakes only when needed. (This is where a zero defect goal really means something, and good liability insurance does not hurt either.) The clutch turns on to drive the compressor when the air pressure in the holding tank drops below a set pressure level. When pressure is not required, a relay opens a circuit stopping the 12 volts going to the coil in the clutch, disengaging it so no power is consumed.

The clutch used in the application is Ogura’s P/N 515294. This clutch is designed for mobile applications, it has a 1” bore and a two groove sheave. Its bearing mounted design makes it easier to mount when compared to a fixed field design clutch.

This company is also working with GM and Allison in developing a diesel fueled microturbine hybrid-electric bus design. Although these vehicles are in the early stages of production and development, future potential for this type of application offers great potential.