

Application Story

Fighting Fire with an Ogura Clutch

The Eddie Paul Cylindrical Energy Fire Fighting system uses an Ogura Electric Clutch for cold and remote start.

Eddie Paul industries, (El Segundo, CA) is known for outstanding engineering designs in TV shows, movies and most recently, in the real world of firefighting. Several years ago, he recognized a problem with the pumping equipment used by many fire departments. That resulted in the CFX Compressed Air-Foam System, which is about 80 percent lighter and smaller than the other pumps currently used on the field.



CEM FastAttack™

The design, which mixes water, air, and soap within one pump, gives the system the ability to handle the tasks of three separate units. It also saves on the amount of water being used to extinguish fires.

"We are hoping this will be the new technology," Eddie Paul said. "It is definitely safer and smaller, it is simple enough for anyone to use it." The CFX is currently being sold to fire departments around the nation. Our customer requested help with cold weather starting as well as having a remote control feature of the pump. This could be accomplished by using an electric clutch. With the clutch, the operator can be safely located away from the fire or hardware if needed and still operate the pump. "Safety is no small matter when it comes to fighting fires. Since I am manufacturing the best pump in the world, I need the best clutch in the world. Reliability in this equipment is paramount (no pun intended)."



Model EC100G

"After some research in the electric clutch market, Ogura Clutch was chosen to supply prototypes for my 23 Hp diesel CFX system. Ogura worked with us to supply a fast off the shelf solution." After some discussion on loads, environment and life needed, Ogura suggested its MA-GT-JD22 12VDC general purpose clutch. This one piece clutch has the following features: 1 7/16 inch bore for robust shaft mounting, E Coating protection for "all weather", outdoor use, solid forged rotor for efficient magnetic coupling and high torque for its size. Oversized bearing(s) are used for its "built in" dual "A" groove pulley for secure torque transmission and superior side load capacity. The clutch is mounted directly on the pump shaft, driven by belts. With this electric clutch, our customer is assured of cold weather starts as well as remote operation of the pump.



Ogura MA-GT-JD22

The CFX is more convenient for firefighters, according to Paul because it can be attached to electrical golf carts and is small enough to mount on a pickup truck. It can go off road, something that current fire trucks cannot do. He is also looking into having the CFX Compressed Air-Foam System mounted onto helicopters. Using the Ogura electric clutch also improves the life of the pump, by disconnecting it from the engine when it is not needed. This clutch also improves fuel efficiency for the whole system.

As his products reach mainstream markets, Paul said he is motivated each time he thinks of a new product to bring into society.

"I love when someone tells me I can't do something," he said. "Because nothing is impossible".

Ogura feels the same way. ●