

Applications For Ogura Clutches On Vacuum Excavation And Extraction Utility Service Equipment



Maintenance on utility service lines in metropolitan areas is being done differently than just a few years back. In the past, after breaking up the road surface or sidewalk, the excavation was done with back hoes. But with today's complex tangle of phone lines (fiber optic, copper wire and natural gas lines), the risk of damage and cost of repair (not to mention the man hours required to disconnect thousands of phone lines) can be very expensive.

Today, utility service lines are exposed with the use of vacuum excavation equipment. These trucks have vacuum blowers, which create a suction inside a holding tank. These tanks have 6", 8", or 10" diameter suction hoses connected, which vacuum up the loose soil and rock. To break up sub soil, these trucks often have high pressure, low volume, positive displacement pumps for high pressure (12,000-psi) water, which is used to break up the sub soil and rock. The loose debris is then sucked up into the truck's holding tank. These holding tanks often have a tilt base to dump the material back into the hole after the work is done. The high pressure loosens the soil around the utility lines without damage to the lines themselves. (This machine also works well when searching for gold and buried treasure.)

The two applications for clutches on this type of equipment are on the vacuum pump, typically around 25HP, and the high pressure water pump. Workers can shut off the vacuum while loosening the soil, then turn off the water pump, and turn on the vacuum pump. This gives both energy savings and extends the life of both pumps.

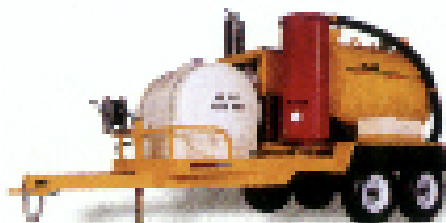
Ogura Industrial has applied our 250 ft lb. general purpose clutches to vacuum pump applications. One customer, who required more torque, has recently moved to the Ogura MMC series, which drives off the truck's PTO drive shaft.

The second application is for a mobile clutch to drive the high pressure water pump. In the past, customers used to purchase a separate clutch and pump but now this package is usually provided by the pump manufacturer.

This application is a take off of the old sewer clean out trucks. The use of Ogura clutches helped to modernize this application, providing the end user energy and cost savings.



*500 gallon x 500 CFM.
Gas Powered - trailer mount.*



*800 gallon x 500 CFM.
Gas powered - trailer mount.*



Monica II