

Application Story

Ogura Clutch Helps Deliver High Performance Hydraulics on European Trucks

H ydraulic Clutch Pumps are getting more popular on commercial vehicles in areas outside of North America. There are advantages and benefits of having a truck equipped with a hydraulic pump kit. Benefits of using a clutch pump kit vs. a PTO drive are both noise reduction and fuel savings (which corresponds directly with CO2 reduction). The new small size high pressure pumps can easily be attached to the belt drive of an engine. In some situations, depending upon pump types and dimensions, it is not always possible to access the PTO connection and the advantage with the clutch pump kit is that it can overcome this installation problem.

Common applications for these clutch pumps are cranes, car carriers, wreckers, dump trucks, construction vehicles and as a power source for hydraulic driven power tools. In these applications, hydraulic power is generated by the flip of a switch at any time regardless of what gear is used or engine speed.

An Ogura high torque, 12VDC mobile clutch with 108 Nm (80 ft.lb.) torque and 134 mm diameter-eight groove serpentine pulley was chosen by an Italian pump kit manufacturer, called A.E.C., to meet their high torque and small size requirements.

A.E.C. was able to design a pump kit with an Ogura clutch which fits into the engine compartment of the Iveco dump truck. Since the small, high performance pump cannot directly take the side load of the engine belt force, AEC designed a bearing mounted support bracket, so all load is transferred into the bracket so no load goes to the pump shaft.



New pump kit with Ogura clutch

A.E.C. stands for “Auto Equipment Center”. The company was founded in the early 1980’s and is based in

Forlimpopoli (FC) / Italy.

Mr. Mariani, the owner of A.E.C., is very proud to offer a wide range of clutch pump kits suitable

for all different kind of commercial vehicles in Europe.

Ogura mobile clutches range in size from 78 to 2.033 Nm (58-1,500 ft.lb.) and feature numerous pulley configurations including v-belt and poly-v as well as universal hub mounts. In general, the user can choose from a straight, splined or tapered bore to match the corresponding pump shaft or shaft adapter. Ogura mobile clutches are available with 12 and 24 VDC.

These models of Ogura clutches were primarily designed for truck air conditioning compressors, but now are also used as clutches for hydraulic pumps (clutch pump), water pump clutches, electro-magnetic fan clutches and clutches for vacuum pumps.

Ogura worked successfully with the Italian company AEC and new clutch projects with other power supply requirements are ongoing. AEC is working very close with the truck and engine manufacturers to get all required information to design the best pump kit solution for each vehicle brand.

Ogura’s reputation for high quality electric clutches made it the supplier of choice because reliability and dependability are not only options, but are the expectations from A.E.C.

You are invited to see the entire clutch pump kits from A.E.C. at the famous “Internationale Automobil-Ausstellung” (IAA International Motor Show) in Hannover, Germany from September 25th through October 2nd. For more information, visit <http://www.iaa.de/en/> •



Iveco 4x4 3L dump truck