Forklift Gears

Forklift Gears - A gear pump is one of the most common kinds of pumps utilized for applications of hydraulic fluid power. A gear pump functions by utilizing the meshing of gears in order to pump fluid by displacement. These machines are widely used in chemical installations to pump fluid with specific viscosity. Two basic kinds of gear pumps are available. Internal gear pumps make use of an an internal and an external spur gear and external gear pumps make use of two external spur gears. Gear pumps pump a constant amount of fluid for each and every revolution. This defines them as fixed or positive displacement. Some gear pump devices are designed to work as either a pump or a motor.

When the gears rotate on the pump, this action works in order to separate the intake side of the pump, creating a suction and a void that is filled by fluid. This fluid is passed by the gears to the discharge side, whereby the fluid is displaced by the meshing of the gears. There are very small and tight mechanized clearances, which along with the speed of revolution effectively prevent the fluid from leaking backwards. The rigid construction of the houses and gears provides the pump its ability to be able to pump highly viscous liquids and allow for excessively high pressures.