Forklift Gears

A gear pump is amongst the most common kinds of pumps utilized for applications of hydraulic fluid power. A gear pump works by utilizing the meshing of gears in order to pump fluid by displacement. These devices are widely used in chemical installations to be able to pump fluid with specific viscosity. Two main types of gear pumps are available. Internal gear pumps utilize an external and an internal spur gear and external gear pumps utilize 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 machines are designed to operate as either a pump or a motor.

While the gears turn on the pump, this action works to separate the intake side of the pump, creating a suction and a void that is filled by fluid. This fluid is carried by the gears to the discharge side, whereby the fluid is displaced by the meshing of the gears. There are tight and really small mechanized clearances, which along with the speed of rotation effectively prevent the fluid from leaking backwards. The rigid fabrication of the houses and gears gives the pump its ability to pump highly viscous liquids and allow for excessively high pressures.