Forklift Gears

Gear for Forklift - A gear pump is among the most common types of pumps used for applications of hydraulic fluid power. A gear pump works by using the meshing of gears to be able to pump fluid by displacement. These machines are commonly used in chemical installations so as to pump fluid with specific viscosity. Two main types of gear pumps exist. Internal gear pumps use an external and an internal spur gear and external gear pumps use two external spur gears. Gear pumps pump a constant amount of fluid for every revolution. This defines them as positive or fixed displacement. A few gear pump devices are designed to operate as either a pump or a motor.

As the gears turn on the pump, this action works to be able to divide 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 mechanical clearances, which along with the speed of revolution effectively prevent the fluid from leaking backwards. The rigid fabrication of the gears and houses gives the pump its ability to pump highly viscous fluids and allow for extremely high pressures.