Forklift Gears

Forklift Gear - A gear pump is one of the most common kinds of pumps designed for applications of hydraulic fluid power. A gear pump operates by utilizing the meshing of gears so as to pump fluid by displacement. These devices are generally utilized in chemical installations to be able to pump fluid with specific viscosity. Two basic kinds of gear pumps exist. 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 revolution. This defines them as fixed or positive displacement. Some gear pump devices are designed to function as either a motor or a pump.

As the gears revolve 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 passed by the gears to the discharge side, where the fluid is displaced by the meshing of the gears. There are very small and tight mechanical clearances, that together with the speed of revolution efficiently avoid the fluid from leaking backwards. The rigid construction of the gears and houses provides the pump its ability to be able to pump highly viscous liquids and allow for extremely high pressures.