Forklift Gears

Amongst the more common types of pump used for hydraulic fuel power applications is the gear pump. The gear pump operates by using the meshing gears so as to pump fluid by displacement. These devices are also usually used in order to pump fluids with specific velocities in chemical installations. Two basic types of gear pumps are available. Internal gear pumps utilize an external and an internal spur gear and external gear pumps make use of two external spur gears. Gear pumps pump a constant amount of fluid for every revolution. This defines them as fixed or positive displacement. Some gear pump machines are designed to function as either a motor or a pump.

As the gears rotate on the pump, this action works to be able to divide the pump's intake side, creating a void and a suction 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 mechanized clearances, that along with the speed of revolution efficiently 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 fluids and allow for excessively high pressures.