Forklift Gears

Amongst the more common types of pump for hydraulic fuel power applications is the gear pump. The gear pump operates by utilizing the meshing gears in order to pump fluid by displacement. These devices are also usually used to be able to pump fluids with specific velocities in chemical installations. Two main kinds of gear pumps are available. Internal gear pumps use an external and an internal spur gear and external gear pumps make use of two external spur gears. Gear pumps pump a continuous amount of fluid for every revolution. This defines them as positive or fixed displacement. A few gear pump devices are designed to work as either a motor or a pump.

As the gears rotate on the pump, this action works so as 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 really small and tight mechanical clearances, which together with the speed of rotation efficiently prevent the fluid from leaking backwards. The rigid design of the houses and gears gives the pump its ability to be able to pump highly viscous liquids and allow for excessively high pressures.