Forklift Gears

Amongst the more common kinds of pump utilized for hydraulic fuel power applications is the gear pump. The gear pump works by utilizing the meshing gears so as to pump fluid by displacement. These devices are even usually used so as to pump fluids with specific velocities in chemical installations. Two basic types of gear pumps exist. Internal gear pumps make use of an external and an internal spur gear and external gear pumps use two external spur gears. Gear pumps pump a continuous amount of fluid for each 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.

When the gears revolve on the pump, this action functions in order to divide the pump's intake side, creating a void and a suction that is filled by fluid. This fluid is carried 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, which together with the speed of revolution efficiently avoid the fluid from leaking backwards. The rigid design of the houses and gears provides the pump its ability to pump highly viscous fluids and allow for excessively high pressures.