Gear for Forklift

Forklift Gears - Among the more common types of pump for hydraulic fuel power applications is the gear pump. The gear pump works by utilizing the meshing gears in order to pump fluid by displacement. These machines are also usually used to be able to pump fluids with precise velocities in chemical installations. 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 continuous amount of fluid for each and every revolution. This defines them as fixed or positive displacement. Some gear pump devices are designed to operate as either a pump or a motor.

While the gears on the pump rotate, they divide on the intake side of the pump. This creates a void and suction which is filled by fluid. This fluid is passed by the gears to the discharge side of the pump, and this is where the meshing of the gears functions to be able to displace the fluid. There are tight and very small mechanical clearances, which together with the speed of rotation effectively avoid the fluid from leaking backwards. The rigid construction of the houses and gears gives the pump its ability to be able to pump highly viscous liquids and allow for extremely high pressures.