

Gear for Forklift

Forklift Gears - A gear pump is one of the most common kinds of pumps used for applications of hydraulic fluid power. A gear pump works by utilizing the meshing of gears in order to pump fluid by displacement. These devices are usually used in chemical installations to pump fluid with specific viscosity. Two main kinds of gear pumps exist. 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 constant amount of fluid for 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.

When the gears on the pump rotate, they separate on the pump's intake side. This creates a void and suction which is filled by fluid. This fluid is carried by the gears to the discharge side of the pump, and this is whereby the meshing of the gears works to displace the fluid. There are tight and really small mechanized clearances, which together with the speed of revolution effectively 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 liquids and allow for extremely high pressures.