

Gears for Forklifts

Forklift Gears - A gear pump is amongst the most common types of pumps designed for applications of hydraulic fluid power. A gear pump operates by utilizing the meshing of gears so as to pump fluid by displacement. These machines are generally used in chemical installations in order to pump fluid with specific viscosity. Two basic types of gear pumps are available. 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 constant amount of fluid for each revolution. This defines them as positive or fixed displacement. Some gear pump machines are designed to work as either a motor or a pump.

While the gears on the pump rotate, they separate on the pump's intake side. This creates a suction and void that 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 operates to displace the fluid. There are really small and tight mechanized clearances, that along with the speed of rotation effectively prevent 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 fluids and allow for extremely high pressures.