

Gears for Forklift

Forklift Gears - A gear pump is one of the most common types of pumps used for applications of hydraulic fluid power. A gear pump operates by using the meshing of gears in order to pump fluid by displacement. These machines are widely used in chemical installations to be able to pump fluid with specific viscosity. Two main types of gear pumps are available. Internal gear pumps make use of an external and an internal spur gear and external gear pumps utilize two external spur gears. Gear pumps pump a constant amount of fluid for every revolution. This defines them as positive or fixed displacement. Several gear pump machines are designed to work as either a pump or a motor.

As the gears on the pump revolve, they divide on the pump's intake side. This creates a suction and void that 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 very small and tight mechanical clearances, which together with the speed of revolution effectively 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 fluids and allow for extremely high pressures.