

Gears for Forklift

Forklift Gear - A gear pump is one of the most common types of pumps for applications of hydraulic fluid power. A gear pump operates by using the meshing of gears so as to pump fluid by displacement. These devices are usually utilized in chemical installations to be able to pump fluid with specific viscosity. Two basic types of gear pumps are available. Internal gear pumps use an internal and an external spur gear and external gear pumps utilize two external spur gears. Gear pumps pump a continuous amount of fluid for each revolution. This defines them as fixed or positive displacement. Several gear pump machines are designed to function as either a pump or a motor.

When the gears revolve on the pump, this action functions so as to divide the pump's intake side, creating a suction and a void that is filled by fluid. This fluid is passed 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, that together with the speed of rotation efficiently prevent the fluid from leaking backwards. The rigid construction of the houses and gears gives the pump its ability to pump highly viscous fluids and allow for extremely high pressures.