

Gears for Forklift

Forklift Gear - A gear pump is one of the most common kinds of pumps designed for applications of hydraulic fluid power. A gear pump operates by utilizing 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 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 continuous amount of fluid for every revolution. This defines them as fixed or positive displacement. Some gear pump devices are designed to function as either a pump or a motor.

While the gears rotate on the pump, this action functions so as to divide the intake side of the pump, 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 mechanized clearances, which together with the speed of rotation efficiently prevent the fluid from leaking backwards. The rigid construction of the gears and houses gives the pump its ability to pump highly viscous liquids and allow for extremely high pressures.