

Gears for Forklifts

Forklift Gears - A gear pump is amongst the most common kinds of pumps designed for applications of hydraulic fluid power. A gear pump works by using the meshing of gears to be able to pump fluid by displacement. These machines are commonly used in chemical installations to pump fluid with specific viscosity. Two basic types of gear pumps are available. Internal gear pumps utilize an external and an internal 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 devices are designed to function as either a pump or a motor.

When the gears revolve on the pump, this action works 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, whereby the fluid is displaced by the meshing of the gears. There are tight and very small mechanical clearances, which along with the speed of rotation effectively avoid the fluid from leaking backwards. The rigid fabrication of the gears and houses gives the pump its ability to pump highly viscous liquids and allow for extremely high pressures.