

Gears for Forklift

Forklift Gears - A gear pump is one of the most common kinds of pumps for applications of hydraulic fluid power. A gear pump works by using the meshing of gears so as 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 exist. Internal gear pumps utilize an external and an internal spur gear and external gear pumps make use of 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 operate as either a pump or a motor.

As the gears turn on the pump, this action works so as to separate the pump's intake side, creating a suction and a void that is filled by fluid. This fluid is carried by the gears to the discharge side, where the fluid is displaced by the meshing of the gears. There are tight and very small mechanized clearances, which together with the speed of revolution efficiently prevent the fluid from leaking backwards. The rigid design of the gears and houses gives the pump its ability to pump highly viscous fluids and allow for excessively high pressures.