

Forklift Gears

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

While the gears rotate on the pump, this action works in order to divide 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 really small mechanical clearances, which along with the speed of revolution effectively avoid the fluid from leaking backwards. The rigid construction of the houses and gears provides the pump its ability to pump highly viscous fluids and allow for excessively high pressures.