

## Forklift Gears

A gear pump is among the most common types of pumps designed for applications of hydraulic fluid power. A gear pump functions by utilizing 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 main types of gear pumps are available. Internal gear pumps utilize an external and an internal spur gear and external gear pumps use 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 machines are designed to function as either a motor or a pump.

While the gears on the pump turn, they separate on the intake side of the pump. This creates a void and suction which is filled by fluid. This fluid is carried by the gears to the discharge side of the pump, and this is where the meshing of the gears functions in order to displace the fluid. There are tight and very small mechanical clearances, which together with the speed of revolution efficiently avoid the fluid from leaking backwards. The rigid fabrication of the gears and houses provides the pump its ability to pump highly viscous liquids and allow for excessively high pressures.