Forklift Gears

Forklift Gear - A gear pump is one of the most common kinds of pumps used for applications of hydraulic fluid power. A gear pump works by using the meshing of gears in order to pump fluid by displacement. These machines are generally used in chemical installations in order to pump fluid with specific viscosity. Two basic types of gear pumps exist. Internal gear pumps make use of 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 positive or fixed displacement. Some gear pump machines are designed to function as either a pump or a motor.

As the gears on the pump rotate, they divide on the pump's intake side. This creates a void and suction that is filled by fluid. This fluid is passed by the gears to the discharge side of the pump, and this is whereby the meshing of the gears operates to be able to displace the fluid. There are very small and tight mechanical clearances, which together with the speed of rotation efficiently avoid the fluid from leaking backwards. The rigid fabrication of the gears and houses provides the pump its ability to be able to pump highly viscous fluids and allow for extremely high pressures.