

Gears for Forklifts

Forklift Gears - One of the more common kinds of pump designed for hydraulic fuel power applications is the gear pump. The gear pump operates by using the meshing gears to be able to pump fluid by displacement. These machines are even widely used to pump fluids with precise velocities in chemical installations. Two main types of gear pumps exist. Internal gear pumps use an external and an internal spur gear and external gear pumps use two external spur gears. Gear pumps pump a constant amount of fluid for every revolution. This defines them as fixed or positive displacement. A few gear pump machines are designed to operate as either a motor or a pump.

As the gears on the pump rotate, they divide on the intake side of the pump. This creates a void and suction which is filled by fluid. This fluid is passed by the gears to the discharge side of the pump, and this is where the meshing of the gears operates to displace the fluid. There are tight and really small mechanized clearances, which together with the speed of revolution effectively avoid the fluid from leaking backwards. The rigid construction of the gears and houses provides the pump its ability to be able to pump highly viscous liquids and allow for extremely high pressures.