

Gears for Forklifts

Forklift Gears - Amongst the more common types of pump for hydraulic fuel power applications is the gear pump. The gear pump operates by utilizing the meshing gears so as to pump fluid by displacement. These devices are even widely used to pump fluids with precise velocities in chemical installations. Two basic 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 constant amount of fluid for every revolution. This defines them as fixed or positive displacement. A few gear pump devices are designed to function as either a pump or a motor.

While the gears on the pump rotate, they divide on the intake side of the pump. This creates a void and suction that is filled by fluid. This fluid is carried by the gears to the discharge side of the pump, and this is whereby the meshing of the gears functions to be able to displace the fluid. There are very small and tight mechanical clearances, that along with the speed of revolution effectively prevent the fluid from leaking backwards. The rigid construction of the gears and houses gives the pump its ability to be able to pump highly viscous fluids and allow for extremely high pressures.