

Forklift Hydraulic Pumps

Hydraulic Pump for Forklift - Commonly used in hydraulic drive systems; hydraulic pumps could be either hydrostatic or hydrodynamic.

Hydrodynamic pumps could be regarded as fixed displacement pumps. This means the flow through the pump per each pump rotation cannot be altered. Hydrodynamic pumps can likewise be variable displacement pumps. These models have a more complicated assembly which means the displacement could be altered. On the other hand, hydrostatic pumps are positive displacement pumps.

Most pumps are working within open systems. Normally, the pump draws oil at atmospheric pressure from a reservoir. For this method to run well, it is imperative that there are no cavitations happening at the suction side of the pump. In order to enable this to work properly, the connection of the suction side of the pump is bigger in diameter than the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is typically combined. A common alternative is to have free flow to the pump, that means the pressure at the pump inlet is a minimum of 0.8 bars and the body of the pump is normally within open connection with the suction portion of the pump.

In a closed system, it is acceptable for there to be high pressure on both sides of the pump. Often, in closed systems, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, normally axial piston pumps are used. As both sides are pressurized, the pump body needs a different leakage connection.