

Hydraulic Pumps for Forklift

Forklift Hydraulic Pump - Hydraulic pumps could be either hydrodynamic or hydrostatic. They are usually used within hydraulic drive systems.

Hydrodynamic pumps could be regarded as fixed displacement pumps. This means the flow all through the pump for each pump rotation cannot be altered. Hydrodynamic pumps could also be variable displacement pumps. These types have a much more complicated construction that means the displacement can be changed. Conversely, hydrostatic pumps are positive displacement pumps.

Nearly all pumps are working in open systems. Normally, the pump draws oil at atmospheric pressure from a reservoir. For this particular method to work well, it is essential that there are no cavitations happening at the suction side of the pump. In order to enable this to function correctly, the connection of the suction side of the pump is larger in diameter as opposed to the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is typically combined. A common alternative is to have free flow to the pump, meaning the pressure at the pump inlet is a minimum of 0.8 bars and the body of the pump is often 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. Usually, in closed systems, the reservoir is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, normally axial piston pumps are used. As both sides are pressurized, the pump body requires a different leakage connection.