

Hydraulic Pumps for Forklift

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

Hydrodynamic pumps could be considered fixed displacement pumps. This means the flow all through the pump for each and every pump rotation cannot be altered. Hydrodynamic pumps can also be variable displacement pumps. These models have a much more complicated construction which means the displacement could be altered. Conversely, hydrostatic pumps are positive displacement pumps.

Most pumps are working within open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. In order for this method to run smoothly, it is vital that there are no cavitations taking place at the suction side of the pump. In order to enable this to function properly, the connection of the suction side of the pump is bigger in diameter compared to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is normally combined. A common preference is to have free flow to the pump, which means the pressure at the pump inlet is a minimum of 0.8 bars and the body of the pump is frequently in open connection with the suction portion of the pump.

In a closed system, it is okay for there to be high pressure on both sides of the pump. Frequently, in closed systems, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, generally axial piston pumps are used. Since both sides are pressurized, the pump body requires a separate leakage connection.