Forklift Hydraulic Pump

Hydraulic Pumps for Forklift - Hydraulic pumps can be either hydrodynamic or hydrostatic. They are usually used in hydraulic drive systems.

Hydrodynamic pumps could be regarded as fixed displacement pumps. This means the flow throughout the pump for each pump rotation cannot be changed. Hydrodynamic pumps could likewise be variable displacement pumps. These kinds have a much more complex assembly which means the displacement can be changed. Conversely, hydrostatic pumps are positive displacement pumps.

Nearly all pumps are functioning in open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. For this process to work efficiently, it is vital that there are no cavitations taking place 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 bigger in diameter than the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is typically combined. A general preference 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 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, generally axial piston pumps are used. Because both sides are pressurized, the pump body needs a different leakage connection.