Forklift Hydraulic Pump

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

A hydrodynamic pump could likewise be considered a fixed displacement pump in view of the fact that the flow throughout the pump for each pump rotation cannot be altered. Hydrodynamic pumps could even be variable displacement pumps. These models have a more complex assembly which means the displacement is capable of being changed. Conversely, hydrostatic pumps are positive displacement pumps.

Most pumps are working within open systems. Normally, the pump draws oil from a reservoir at atmospheric pressure. In order for this particular method to work efficiently, it is imperative that there are no cavitations occurring 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 larger in diameter than the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is usually combined. A common choice 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. 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 utilized. Since both sides are pressurized, the pump body needs a different leakage connection.