

Hydraulic Pump for Forklift

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

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

The majority of pumps are functioning in open systems. Normally, the pump draws oil from a reservoir at atmospheric pressure. In order for this particular process to function efficiently, 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 bigger in diameter as opposed to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is typically combined. A general alternative is to have free flow to the pump, meaning the pressure at the pump inlet is at least 0.8 bars and the body of the pump is often in 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. 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 different leakage connection.