

Forklift Hydraulic Pump

Forklift Hydraulic Pump - Normally used in hydraulic drive systems; hydraulic pumps could be either hydrostatic or hydrodynamic.

Hydrodynamic pumps could be considered fixed displacement pumps. This means the flow all through the pump for each pump rotation cannot be changed. Hydrodynamic pumps can also be variable displacement pumps. These kinds have a more complex assembly which means the displacement could be adjusted. On the other hand, hydrostatic pumps are positive displacement pumps.

Most pumps are functioning within open systems. Usually, the pump draws oil at atmospheric pressure from a reservoir. In order for this particular method to function well, it is vital that there are no cavitations occurring at the suction side of the pump. So as 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 typically 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 the instances of a closed system, it is acceptable for both sides of the pump to be at high pressure. Frequently in these circumstances, the tank 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 separate leakage connection.