

Forklift Hydraulic Pump

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

A hydrodynamic pump could likewise be considered a fixed displacement pump as the flow through the pump for every pump rotation cannot be altered. Hydrodynamic pumps can also be variable displacement pumps. These types have a much more complex assembly which means the displacement is capable of being adjusted. On the other hand, hydrostatic pumps are positive displacement pumps.

The majority of pumps are working in open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. For this process to run well, it is vital that there are no cavitations occurring at the suction side of the pump. In order to enable this to work 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 usually combined. A common option 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. Usually in these conditions, the tank is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, generally axial piston pumps are used. As both sides are pressurized, the pump body requires a different leakage connection.