Hydraulic Pumps for Forklift

Forklift Hydraulic Pumps - Usually utilized in hydraulic drive systems; hydraulic pumps can be either hydrodynamic or hydrostatic.

Hydrodynamic pumps can be considered fixed displacement pumps. This means the flow through the pump per each pump rotation could not be altered. Hydrodynamic pumps could also be variable displacement pumps. These kinds have a much more complex composition which means the displacement is capable of being changed. Conversely, hydrostatic pumps are positive displacement pumps.

The majority of pumps work as open systems drawing oil at atmospheric pressure from a reservoir. It is important that there are no cavities occurring at the suction side of the pump for this process to work efficiently. In order to enable this to work correctly, the connection of the suction side of the pump is larger in diameter compared to the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is usually combined. A common alternative 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 in 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. Often in these circumstances, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, generally axial piston pumps are utilized. Because both sides are pressurized, the pump body needs a separate leakage connection.