Forklift Hydraulic Pump

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

A hydrodynamic pump may also be considered a fixed displacement pump in view of the fact that the flow all through the pump for every pump rotation could not be changed. Hydrodynamic pumps could also be variable displacement pumps. These kinds have a much more complicated construction that means the displacement can be adjusted. On the other hand, hydrostatic pumps are positive displacement pumps.

Most pumps work as open systems drawing oil at atmospheric pressure from a reservoir. It is important that there are no cavities taking place at the suction side of the pump for this particular process to work well. In order to enable this to work right, 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 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 normally 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, generally axial piston pumps are used. As both sides are pressurized, the pump body needs a different leakage connection.