Forklift Hydraulic Pumps

Hydraulic pumps can be either hydrodynamic or hydrostatic. They are usually utilized in hydraulic drive systems.

A hydrodynamic pump may also be considered a fixed displacement pump as the flow through the pump per each pump rotation could not be altered. Hydrodynamic pumps can even be variable displacement pumps. These models have a more complex assembly that means the displacement can be changed. Conversely, hydrostatic pumps are positive displacement pumps.

Most pumps function as open systems drawing oil at atmospheric pressure from a reservoir. It is essential that there are no cavities happening at the suction side of the pump for this particular method to function efficiently. 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. Where multi pump assemblies are concerned, the suction connection of the pump is usually combined. A common choice 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 frequently in open connection with the suction portion of the pump.

In a closed system, it is okay 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 instance of closed loop systems, normally axial piston pumps are used. For the reason that both sides are pressurized, the pump body requires a different leakage connection.