Hydraulic Pumps for Forklift

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

A hydrodynamic pump could even be considered a fixed displacement pump as the flow through the pump for each and every pump rotation could not be adjusted. Hydrodynamic pumps can even be variable displacement pumps. These types have a more complicated construction which means the displacement is capable of being changed. Conversely, hydrostatic pumps are positive displacement pumps.

Most pumps are working in open systems. Usually, the pump draws oil from a reservoir at atmospheric pressure. In order for this process to run smoothly, it is vital that there are no cavitations occurring at the suction side of the pump. In order to enable this to work properly, the connection of the suction side of the pump is larger in diameter than the connection of the pressure side. With regards to multi pump assemblies, 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 at least 0.8 bars and the body of the pump is often in open connection with the suction portion of the pump.

In the cases of a closed system, it is acceptable for both sides of the pump to be at high pressure. Often in these situations, the reservoir is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, generally axial piston pumps are utilized. In view of the fact that both sides are pressurized, the pump body needs a different leakage connection.