Forklift Hydraulic Pump

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

Hydrodynamic pumps can be regarded as fixed displacement pumps. This means the flow through the pump per each pump rotation cannot be changed. Hydrodynamic pumps could also be variable displacement pumps. These types have a more complex construction which means the displacement can be adjusted. Conversely, hydrostatic pumps are positive displacement pumps.

Most pumps are working in open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. In order for this particular process to function efficiently, it is imperative that there are no cavitations happening 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 larger in diameter compared to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is typically combined. A common preference is to have free flow to the pump, which means the pressure at the pump inlet is at least 0.8 bars and the body of the pump is often within open connection with the suction portion of the pump.

In the cases of a closed system, it is all right for both sides of the pump to be at high pressure. Frequently in these circumstances, the reservoir is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, usually axial piston pumps are used. Since both sides are pressurized, the pump body requires a separate leakage connection.