Forklift Hydraulic Pumps

Hydraulic pumps can be either hydrodynamic or hydrostatic. They are normally used within hydraulic drive systems.

A hydrodynamic pump may even be regarded as a fixed displacement pump since the flow through the pump for each pump rotation could not be changed. Hydrodynamic pumps could even be variable displacement pumps. These models have a much more complicated construction which means the displacement is capable of being adjusted. Conversely, hydrostatic pumps are positive displacement pumps.

The majority of pumps are functioning within open systems. Usually, the pump draws oil at atmospheric pressure from a reservoir. For this method to function efficiently, it is vital that there are no cavitations taking place at the suction side of the pump. So as to enable this to function properly, the connection of the suction side of the pump is bigger in diameter compared to the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is typically combined. A general alternative is to have free flow to the pump, that means 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 the cases of a closed system, it is all right for both sides of the pump to be at high pressure. Usually in these conditions, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, usually axial piston pumps are utilized. As both sides are pressurized, the pump body requires a separate leakage connection.