Forklift Hydraulic Pumps

Commonly used within hydraulic drive systems; hydraulic pumps can be either hydrodynamic or hydrostatic.

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

Nearly all pumps are functioning within open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. In order for this method to work well, it is essential that there are no cavitations occurring at the suction side of the pump. So as to enable this to work properly, 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 normally combined. A common option is to have free flow to the pump, which means the pressure at the pump inlet is a minimum of 0.8 bars and the body of the pump is normally 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. Often in these situations, the reservoir is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, usually axial piston pumps are utilized. Since both sides are pressurized, the pump body requires a separate leakage connection.