

## Forklift Hydraulic Pumps

Hydraulic pumps could be either hydrostatic or hydrodynamic. They are commonly utilized in hydraulic drive systems.

Hydrodynamic pumps can be considered fixed displacement pumps. This means the flow throughout the pump for every pump rotation could not be altered. Hydrodynamic pumps could even be variable displacement pumps. These models have a much more complicated composition which means the displacement can be changed. Conversely, hydrostatic pumps are positive displacement pumps.

Most pumps are functioning within open systems. Typically, the pump draws oil from a reservoir at atmospheric pressure. In order for this process to work efficiently, it is vital that there are no cavitations taking place at the suction side of the pump. In order to enable this to work right, the connection of the suction side of the pump is larger in diameter as opposed to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is normally combined. A general option 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 often within open connection with the suction portion of the pump.

In a closed system, it is all right for there to be high pressure on both sides of the pump. Often, in closed systems, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, generally axial piston pumps are utilized. As both sides are pressurized, the pump body requires a different leakage connection.