Forklift Hydraulic Pumps

Forklift Hydraulic Pumps - Hydraulic pumps can be either hydrodynamic or hydrostatic. They are usually utilized in hydraulic drive systems.

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

Most pumps are functioning within open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. For this particular process to work efficiently, it is imperative that there are no cavitations taking place at the suction side of the pump. So as to enable this to work right, the connection of the suction side of the pump is larger in diameter than the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is typically combined. A common alternative 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 frequently 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. Frequently 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.