Forklift Hydraulic Pump

Forklift Hydraulic Pump - Commonly utilized 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 could not be altered. Hydrodynamic pumps can also be variable displacement pumps. These types have a more complicated composition which means the displacement is capable of being altered. Conversely, hydrostatic pumps are positive displacement pumps.

Nearly all pumps work as open systems drawing oil from a reservoir at atmospheric pressure. It is important that there are no cavities occurring at the suction side of the pump for this method to function smoothly. So as to enable this to function correctly, the connection of the suction side of the pump is bigger in diameter compared to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is usually combined. A common preference 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 within 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. Usually in these conditions, the tank is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, normally axial piston pumps are utilized. Since both sides are pressurized, the pump body needs a separate leakage connection.