Hydraulic Pumps for Forklift

Forklift Hydraulic Pumps - Commonly used within hydraulic drive systems; hydraulic pumps can be either hydrostatic or hydrodynamic.

Hydrodynamic pumps could be considered fixed displacement pumps. This means the flow throughout the pump for each pump rotation cannot be adjusted. Hydrodynamic pumps can also be variable displacement pumps. These types have a much more complex construction that means the displacement is capable of being changed. Conversely, hydrostatic pumps are positive displacement pumps.

The majority of pumps are functioning within open systems. Typically, the pump draws oil at atmospheric pressure from a reservoir. In order for this particular method to run smoothly, it is essential 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 bigger in diameter as opposed to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is usually 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 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. Usually in these situations, the tank is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, generally axial piston pumps are used. Because both sides are pressurized, the pump body needs a different leakage connection.