Forklift Hydraulic Pumps

Forklift Hydraulic Pump - Hydraulic pumps can be either hydrodynamic or hydrostatic. They are normally used in hydraulic drive systems.

Hydrodynamic pumps can be regarded as fixed displacement pumps. This means the flow all through the pump for each pump rotation cannot be adjusted. Hydrodynamic pumps can even be variable displacement pumps. These kinds have a much more complex assembly that means the displacement is capable of being adjusted. Conversely, hydrostatic pumps are positive displacement pumps.

The majority of pumps are working in open systems. Typically, the pump draws oil from a reservoir at atmospheric pressure. In order for this process to function efficiently, it is imperative that there are no cavitations occurring 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 than the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is usually combined. A common alternative is to have free flow to the pump, meaning the pressure at the pump inlet is a minimum of 0.8 bars and the body of the pump is often within 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 case of closed loop systems, usually axial piston pumps are utilized. For the reason that both sides are pressurized, the pump body needs a different leakage connection.