

Forklift Hydraulic Pump

Forklift Hydraulic Pump - Usually used in hydraulic drive systems; hydraulic pumps could be either hydrodynamic or hydrostatic.

Hydrodynamic pumps could be regarded as fixed displacement pumps. This means the flow through the pump per each pump rotation could not be changed. Hydrodynamic pumps can also be variable displacement pumps. These types have a much more complicated construction which means the displacement is capable of being adjusted. On the other hand, hydrostatic pumps are positive displacement pumps.

Most pumps are working in open systems. Usually, the pump draws oil at atmospheric pressure from a reservoir. For this particular 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 function correctly, the connection of the suction side of the pump is bigger in diameter than the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is typically combined. A general 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 frequently within open connection with the suction portion of the pump.

In the instances of a closed system, it is all right for both sides of the pump to be at high pressure. Often in these situations, the tank is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, usually axial piston pumps are utilized. Since both sides are pressurized, the pump body needs a separate leakage connection.